



Republic of Zambia

Education Sector National Implementation Framework III 2011 - 2015

Implementing the Sixth National Development Plan



Government of the Republic of Zambia
Ministry of Education, Science, Vocational Training and Early Education
Lusaka

Foreword

The National Implementation Framework III (NIF III) will guide the implementation of the Sixth National Development Plan (SNDP) 2011 to 2015. The purpose of NIF III is to provide a framework for the Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) which will facilitate the realisation of the SNDP goals as well as the achievement of Zambia's long term development vision of becoming a prosperous middle income country by the year 2030 as articulated in the National Vision 2030. NIF III also aims to drive the education sector's contribution to the achievement of some of the Millennium Development Goals (MDGs) and targets.

Like the National Implementation Framework II (NIF II) before it, the purpose of the NIF III is twofold. Firstly, it seeks to guide the articulation of broader objectives of the SNDP into clear activities in the fields of education, science, vocational training and early education. In this regard, NIF III will be the SNDP operational tool at all levels of the education system from the Ministry Headquarters to the Provincial Education Offices (PEOs), District Education Board Secretaries (DEBS) and learning institutions. Secondly, NIF III intends to serve as an important instrument for monitoring implementation performance, focusing primarily on the achievement of outcomes and impact. In the same vein, it provides the framework for tracking resource utilisation.

I wish to encourage all Ministry officials, stakeholders and collaborating partners to make the best use of this document during the implementation and monitoring of the SNDP.



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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AEP	Alternative Education Programmes
AWPB	Annual Work Plans and Budgets
BESSIP	Basic Education Sub-Sector Investment Programme
CBO	Community-based Organisation
CBU	Copperbelt University
CPs	Cooperating Partners
CPD	Continuing Professional Development
CSEN	Children with Special Educational Needs
CSO	Central Statistical Office
DEBS	District Education Board Secretary
DECC	District Education Coordinating Committee
DEMC	District Education Management Committee
DODE	Directorate of Distance Education
DOL	Division of Labour
EBS	Education Broadcasting Services
ECCDE	Early Childhood Care, Development and Education
EFA	Education for All
FNDP	Fifth National Development Plan
FTI	Fast Track Initiative
GBS	General Budget Support
GER	Gross Enrolment Ratio
GNP	Gross National Product
GDP	Gross Domestic Product
GPE	Global Partnership for Education
GPI	Gender Parity Index
GRZ	Government of the Republic of Zambia
HIV	Human Immuno-deficiency Virus
ICT	Information and Communication Technology
INSET	In-service Training
JASZ	Joint Assistance Strategy for Zambia
LFFTE	Limited Financial Flow Tracking Exercise
LSEN	Learners with Special Educational Needs
MCDMCH	Ministry of Community Development, Mother and Child Health
MoESP	Ministry of Education Strategic Plan
MDGs	Millennium Development Goals
MESVTEE	Ministry of Education, Science, Vocational Training and Early Education
M&E	Monitoring and Evaluation
MTEF	Medium-Term Expenditure Framework
NAC	National AIDS Council
NER	Net Enrolment Ratio
NGOs	Non-Governmental Organisation
NIF	National Implementation Framework
NSC	National Science Centre
ODL	Open and Distance Learning

OVC	Orphans and Vulnerable Children
PBR	Pupil Book Ratio
PEO	Provincial Education Office
PER	Public Expenditure Review
PPP	Public-Private-Partnership
PECC	Provincial Education Coordinating Committee
PETS	Public Expenditure Tracking Survey
PITC	Policy and Implementation Technical Committee
PRBS	Poverty Reduction Budget Support
PTR	Pupil Teacher Ratio
SACMEQ	Southern and Eastern African Consortium for Monitoring Education Quality
SADC	Southern Africa Development Community
SBS	Sector Budget Support
SHN	School Health and Nutrition
SNDP	Sixth National Development Plan
SPRINT	School Programme of In-service for the Term
SWAp	Sector Wide Approach
TBS	Target Budget Support
TEVET	Technical Education and Vocational Training
TEVETA	Technical Education and Vocational Training Authority
UNESCO	United Nations Education, Scientific and Cultural Organisation
UNZA	University of Zambia
ZACODE	Zambian College of Distance Education
ZAMREN	Zambia Education Research Network
ZLS	Zambia Library Service
ZNBC	Zambia National Broadcasting Corporation

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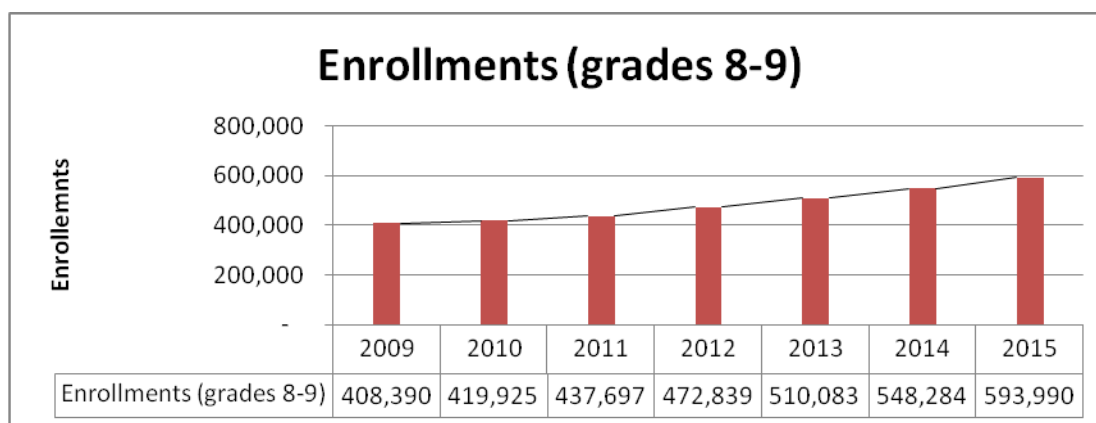
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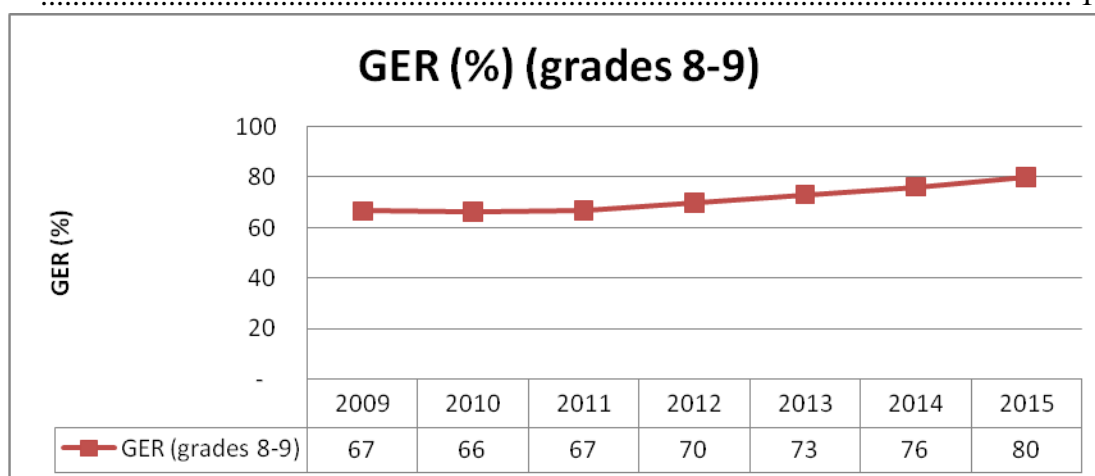
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Executive Summary

Executive Summary

During the Fifth National Development Plan (FNDP) period, the Ministry of Education and the Ministry of Science, Technology and Vocational Training, operated as two separate ministries. With the coming in of the new government, the ministries were merged into one (Ministry of

Education, Science, Vocational Training and Early Education). The merger was aimed at achieving the following:

- (a) Harmonising the planning of education delivery from the lowest to the highest level as previously the levels were not “speaking” to each other as they were under different portfolios and ministries;
- (b) For easy targeting and improved budgeting of educational activities, thereby removing duplications; and
- (c) For easy monitoring, evaluation and reporting as this will be done under one umbrella.

With the change of Government in 2011, there has been a policy shift from basic (Grades 1-9) and high schools (Grades 10-12) to primary (Grades 1-7) and secondary (Grades 8-12) school system. After analysing the situation of the education system the new government was inheriting, it became apparent that the issues of quality and relevance of education had not been addressed resulting in provision of an education which was not responsive to individual and national needs. The results from the National Assessment surveys between 2003 and 2008 show that learner performance levels have remained static at 40 percent, clearly showing that there is very little teaching and learning going on in schools.

Amongst notable challenges that have contributed to this poor performance of the education systems include low level commitment by many education providers, reforms that were not matched with adequate preparation, financial, material and human resources. This is evident when one assesses how many schools conformed to the planned reforms. Education reforms of 1996 proposed that schools be transformed from Primary (Grade 1-7) into Basic (Grade 1-9) and Secondary (Grade 8-12) into High (Grade 10-12). However, out of the 8,493 Primary Schools only 3,176 have been transformed to full Basic Schools, while of the 644 Secondary Schools only 232 have been transformed into High Schools. This means that only a small number of schools conformed to this directive whilst a large number of schools did not. Therefore, this policy change is aimed at addressing the challenges encountered in the previous education system such as the following:

- (a) The primary schools that were offering Grades 1-4 or 5-7 or 1-7 that were converted to basic schools to offer Grades 1-9 or to high school to offer grades 10-12 did not have the appropriate infrastructure such as laboratories, workshops, desks and other specialised rooms and facilities. Up to now these facilities have never been provided to these institutions thereby compromising the provision of quality education;
- (b) Some of the primary schools that were converted to basic schools did not have suitably qualified teachers to teach the Grades 8-9 which required specialisation, hence the use of unspecialised primary school teachers in those grades. Equally, the basic and secondary schools that were converted to high schools did not have qualified staff in some subjects and ended up utilising diploma holders to teach at high school;
- (c) There was wastage in some schools for teachers that were adequately qualified and posted to basic schools as most of them did not teach the required minimum standard number of periods, hence being under-utilised;
- (d) The teacher education system was meant to train teachers for Grades 1-7, 8-9 and 10-12 and not the basic and high school education system;
- (e) Some schools, especially the grant aided and privately owned, resisted the policy change and continued with the previous system of primary and secondary;

-
- (f) School management became a challenge in schools where the head teacher was less qualified (i.e. head teacher had certificate while some teachers had diplomas or degrees); and
 - (g) The collection of fees was a challenge as the Grades 1-7 were not paying while the 8-9 were required to pay.

This plan, therefore, will draw its strength from the policy shift of the new government as well as the increased commitment to allocate more resources to the Education and Skills sector to implement among others the following:

- (a) Re-introduce free education for all from Grade 1 to Grade 12 and make it compulsory;
- (b) Upgrade all primary schools providing Grades 1 to 4 or those providing grades 5 to 7 to full primary schools offering Grade 1 to Grade 7;
- (c) Upgrade community schools to fully fledged primary and secondary schools;
- (d) Review the language of instruction policy so as to promote the teaching of local languages at primary level;
- (e) Phase out basic and high school education system and re-introduce the conventional primary and secondary education system;
- (f) Provide and facilitate Early Childhood Education centres and teachers;
- (g) Open two paths for Grade 8 pupils based on their Grade 7 performance to follow up to grade twelve. One will be for learners who will follow an academic path and the other for learners who will follow a technical path;
- (h) Re-orient the curriculum for primary and secondary schools to put emphasis on life skills subjects to enable learners cope with the demands of self-employment and the labour market;
- (i) Upgrade teachers' qualifications to meet the minimum required standards through in-service training (reintroduce the apprenticeship system);
- (j) Promote inclusive education by integrating children with mild to moderate learning disabilities in the mainstream schools and offer special education to those who cannot be integrated;
- (k) Give priority to the teaching of science subjects in educational institutions at all levels;
- (l) Promote collaboration between industry and research institutions; and
- (m) Establish a national research centre to coordinate research activities.

It is worth mentioning that the extent to which this plan has conceptualised and incorporated the implementation of the aspirations of the new government as articulated above is limited to the known resource envelope of the Ministry as outlined in the Medium Term Expenditure Framework (MTEF). This means that in certain instances this plan will only go as far as stating the policy intent and specify activities to be undertaken so as to develop frameworks and modalities of implementing the policy aspirations (e.g. modality of introducing free and compulsory education for Grades 1 to 12).

The implementation of NIF III will be reviewed from time to time in light of the unfolding reality of available resources from both internal and external sources. The budget detailed in chapter 16 has used a model that presents realistic estimates for both funding requirements and expected revenue and expenditure over the period. These have taken the policy aims into account and acknowledge that they may not be fully achievable over the period of NIF III. Therefore a specific modelling has been undertaken which has lower aspirations but sets the basis on which the policy objectives over the longer term will be reached.

Macro-level Context

During the Fifth National Development Plan (FNDP) that covered the 2006-2010 period, GDP growth averaged 6.3 percent per annum, compared with an average of 4.8 percent attained during the Poverty Reduction Strategy Paper (PRSP)/Transitional National Development Plan period (2002-2005). Macroeconomic stability, growth and overall improvements in the investment climate had a positive impact on economic growth. Annual inflation was also reduced during this period, averaging 11.3 percent, compared to 20 percent during the PRSP/ TNDP period.

In 2010, which was the last year of NIF II implementation, the budget performance was generally satisfactory although overall budget deficit was 0.9 percentage points above the projection of 2.4 percent of GDP. Real GDP during the year grew by 7.6 percent, compared to the 7 percent target for the FNDP. In terms of value addition at constant 1994 prices, real GDP increased to K 4,312.6 million in 2010 from K 4, 007.7 million recorded in 2009. Single digit inflation was sustained in 2010 at 7.9 percent although it fell short of the FNDP target of 5 percent.

Notwithstanding the improved economic performance, Zambia has not significantly reduced poverty. According to the latest comprehensive Living Conditions Monitoring Survey that was undertaken in 2008, 64 per cent of Zambia's population lived below the poverty line, with rural poverty levels at 81 percent. Income distribution remained highly unequal, resulting in worsening human deprivation as demonstrated by the decline in the country's Human Development Index.

Education and Skills Sector Budget Performance: 2008-2010

During the Fifth National Development Plan (FNDP- 2006 to 2010), funding to the sector steadily increased from 2.9 of GDP to 3.5 percent. In 2010 the education sector was allocated the all-time highest proportion of 19.9 percent of the national budget, compared to 15.4 percent for 2008 and 17.2 percent for 2009. As much as 90.2 percent of the 2010 Ministry of Education budget came from the Government while Cooperating Partners' (CPs) share was 9.8 percent. The total budget for the education sector during 2010 stood at K3,733 billion, compared to the FNDP figure of K 2,976 billion, which resulted in funding surplus of K757 billion. Actual expenditure in 2010 was K3, 446 billion, or 92 percent of the amount budgeted for during 2010.

Education and Skills is one of the sectors which have consistently received the highest volume of external aid. However, it is important to note that, since 2009, the number of CPs has reduced from 12 in 2006 to 6 active in 2012. Without the US\$30 million per year of the Education for All Fast Track Initiative (EFA FTI) funding in the basket fund would have shrunk considerably as some CPs had migrated to Poverty Reduction Budget Support (PRBS) and others had withdrawn from the sector entirely (e.g. Canada and Finland). Notwithstanding this, the Education sector remained the second largest recipient of external aid from CPs during the FNDP period. Over the 2006-2009 period, the Netherlands accounted for 26 percent of external aid flow to the sector, followed by the EFA FTI, Ireland and USA at 17 percent, 15 percent and 13 percent, respectively. During the five years of FNDP, the Education sector received US\$ 423.1 million from CPs, which was close to 90 percent of the FNDP planned allocation.

Education and Skills Sector Performance

Access

The overall delivery of Early Childhood, Care and Development Education (ECCDE) services has remained largely underdeveloped and uncoordinated. In 2007, only 17.1% of children, mostly in urban areas, had access to ECCDE in Zambia. Even with this paltry percentage of the provision

of early childhood education, the quality of the service is still low. In addition, the learning environment, curriculum and the instruction materials are often inappropriate and inadequate.

A total of 3,045,277 pupils enrolled in Grades 1 to 7 in 2010, which was a significant increase from about 2,000,000 in 2005. Of the total enrolment, 1,525,668 were girls while 1, 519, 609 were boys. The increase was attributed, in part, to the free education policy that the Government put in place as well as the expansion of physical space through infrastructure development. Community schools have also significantly assisted especially the OVCs and children from poor households to access education. In 2010, the 2,851 community schools had 546, 899 learners, representing about 18 percent of the total primary school enrolment. Notwithstanding these efforts, community schools continued to face several challenges that included inadequate teaching skills; insufficient teaching and learning materials/equipment; sub-standard infrastructure; and inadequate qualified human resource. Despite the exponential increase in enrolments, it was established that about 10 percent of children still did not attend school.¹ The problem was more severe in low cost areas and among small-scale agricultural and fishing communities.

One of the MDGs that is of particular significance for the education sector is Goal number 2, namely, *Achieve Universal Primary Education*. The target is to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. All the three indicators for this target performed quite well against the baseline year of 1990. For example, Zambia made significant progress towards the realisation of universal primary education by 2015 and the elimination of gender disparity in primary education. Enrolments rose by over 1,500,000 learners at Basic School level between 2002 and 2010 and the proportion of females enrolled at that level was close to 50 percent. In addition, the completion rate at Basic School level was over 90 percent. However, gender parity in secondary schools and tertiary institutions remained a challenge between 2002 and 2010. Completion rates for Grade Seven, however, has significantly improved due to the introduction of free Basic education and the removal of cut-off points. At Grade 9 it also increased from 35.3 percent to 52.7 percent between 2002 and 2009. Although the rate was quite low, this was a significant increase considering that the rate rose by 17.4 percentage points. The completion rate for girls, however, slightly lagged behind that for boys. The completion rate for Grade 12 also improved.

Education is a major factor in enhancing a country's social and economic development as it aids in fighting against poverty and hunger. Since 1990, the percentage of pupils reaching Grade 7 has improved from 64% to 85.2% although literacy rates have shown a decline from 75% in 1990 to 70% in 2004. The potential for achieving Universal Primary Education for boys and girls by 2015 exists especially when it is considered that the rate increased by almost 10 percentage points (from 73% to 82.2%) in one year (2003 to 2004). Therefore, reaching 100% (an additional 17%) in 10 years from now is a real possibility.

Despite the remarkable increase in pupil enrolment of about 16 percent from 2005 to 2010, progression from Grade 7 to Grade 8 has remained almost static at 58 percent during the same period. This implies that Grade 8 places are still not adequate to meet the existing demand.

Currently, access to TEVET is very low with capacity and vulnerability acting as major barriers. About 300,000 youths leave the school system every year at both Grades 9 and 12. The TEVET

¹ According to the 2006 Living Conditions Monitoring Survey, 73 percent of 7-10 yrs children attend school while 89 percent of the 11-13yrs children attend school.

system can only enrol or absorb about 14,000 students annually, (i.e., about 4.6 percent rate of absorption). With a total youth population estimated at 2,910,297 for the year 2010, the total annual enrolment for TEVET and universities was below 50,000, giving a tertiary education Youth Gross Enrolment Ratio of about 2 percent.

Despite the increase in the number of private universities, access to university education remains a serious challenge. Currently, only 8 percent of school leavers access public universities. Government, in its efforts to increase access to public universities, has expanded infrastructure in all the three public universities² in terms of lecture theatres, classrooms and student hostels. As a result of this intervention, Government has managed to increase university enrolments. In addition, Government has entered into Public Private Partnerships (PPP) that will develop various infrastructures at the three universities.

Quality

The quality of education in Zambia has remained low as revealed by the test and examination results. The large increase in enrolments has been greeted by higher pupil teacher ratios and higher pupil classroom ratios, a state of affairs that has tended to compromise quality. Assessments of pupil performance in numeracy and literacy, for example, have shown that average scores rose from 34 to 38 percent between 1999 and 2003 and thereafter remained stagnant. The average scores for Grade 7 and Grade 9 examinations revealed a similar trend.

According to the 2008 National Assessment Survey Report, the national mean performance was 35.3 percent in English, 39.4 percent in Mathematics, 40.2 percent in Life Skills and 39.4 percent in Zambian Languages. This piece of information is summarised in Table 1 below.

Table 1: 2008 National Assessment

Subject	All	Boys	Girls
Reading in English	35.3%	35.9%	35.1%
Mathematics	39.3%	39.8%	37.2%
Life Skills	40.2%	40.8%	40.0%

This findings presented in Table 1 reflect stagnation in pupil performance when compared to the 2006 survey where the mean performances in English, Mathematics and Zambian Languages were 34.5 percent, 38.45 percent and 37.79 percent, respectively. The poor performance in 2008 is further corroborated by the 2007 SACMEQ III results which show that Zambia's performance has remained far below the SACMEQ as shown in Table 2 below.

Table 2: SACMEQ Scores

Country	Pupil Reading Score			Pupil Mathematics Score		
	2000	2007		2000	2007	
Botswana	521.1	534.6	▲	512.9	520.9	▶
Kenya	546.5	437	▶	563.3	557.0	▶
Malawi	428.9	433.5	▶	432.9	447.0	▲
Mauritius	536.4	573.5	▲	584.6	623.3	▲

² These are University of Zambia, Copperbelt University and Mulungushi University.

Country	Pupil Reading Score			Pupil Mathematics Score		
	2000	2007		2000	2007	
South Africa	492.3	494.9	▶	486.1	494.8	▶
Tanzania	545.9	577.8	▲	522.4	552.7	▲
Uganda	482.4	478.7	▶	506.3	481.9	▼
Zambia	440.1	434.4	▶	435.2	435.2	▶
Zanzibar	478.2	533.9	▲	478.1	486.2	▶
Zimbabwe	504.7	507.7	▶	xx	519.8	▶
SACMEQ	500.0	511.8	▲	500.0	509.5	▶

In 2010, a total of 125,473 (71,142 boys; 54,331 girls) candidates obtained full Junior Secondary School Leaving Certificate, representing a pass percentage of 48.87% overall, with the pass percentage of 52.29% for boys and 45.01% for girls. A total of 120,158 candidates were selected to Grade ten of which 66,550 were boys and 53,608 were girls, representing a progression rate of **46.80%** compared to **45.80%** in 2009. Table 3 and Table 4 below show the national performance at Grade 9 and Grade 12 levels respectively from 1998 to 2009.

Table 3: Grade 9 Performance (1998-2009)

Year	Grade 9				
	Number who Sat			Progression Rates	Certificate Pass
	Boys	Girls	National		
1998	62,614	51,565	114,179	19.62%	49.15%
1999	52,538	44,861	97,399	25.48%	54.93%
2000	54,954	47,101	102,055	27.90%	60.06%
2001	60,332	51,478	111,810	25.86%	53.79%
2002	66,363	57,120	123,483	26.62%	n/a
2003	72,887	62,551	135,438	26.91%	56.10%
2004	82,523	70,910	153,433	26.55%	53.30%
2005	93,446	80,106	173,552	36.32%	55.13%
2006	94,416	81,847	176,263	37.94%	48.33%
2007	102,534	87,065	189,599	50.65%	50.65%
2008	121,365	106,742	228,107	39.80%	48.57%
2009	130,224	17,023	247,247	45.80%	48.57%

Table 4: Grade 12 Performance

Year	Grade 12			
	Boys	Girls	National	SC %
1998	16,846	9,626	26,472	65.39%
1999	16,561	10,016	26,577	63.25%
2000	16,691	10,415	27,106	70.33%
2001	19,008	12,003	31,011	65.69%
2002	19,738	12,732	32,470	69.50%
2003	20,903	14,663	35,566	64.53%
2004	20,970	14,823	35,793	66.40%

Year	Grade 12			
	Boys	Girls	National	SC %
2005	23,379	17,420	40,799	56.90%
2006	26,478	18,890	45,368	61.25%
2007	29,138	21,806	50,944	60.89%
2008	32,585	24,544	57,129	61.08%
2009	31,714	23403	55,117	60.63%

The quality of education is a key element of the SNDP which has a stated priority of quality improvement. The focus is on improving teacher supply, recruitment, deployment and retention; provision of teaching and learning materials and infrastructure development. Additional focus is on school level processes such as improved school governance, teacher supervision, quality assurance, Continuing Professional Development (CPD) and pedagogical support. Specifically to address efficiency and effectiveness, the intention is to improve curriculum development; management and governance of institutions; community involvement; as well as civil society and private sector engagement.

Teachers hold the key to better quality service provision. As such, their training, both pre- and in-service is important. Although teacher training has expanded, the output does not meet the demand for teachers at various levels within the education delivery system. This problem is more acute at senior secondary school level where, officially, teachers are expected to have a degree qualification in their teaching subjects but, in practice, only 12 percent possess this. More acute is the shortage of qualified teachers of Mathematics and Science. In 2010, at senior secondary school level, out of the 1,709 teachers required for Mathematics, only 183 graduate teachers were available and only 607 graduate teachers were specialised in Science instead of the required 2,509.

For a school to function effectively it also requires sufficient leadership and management skills to improve teacher and pupil attendance, sufficient pupil-teacher contact hours to deliver better learning outcomes across the system.

Goal and Strategic Focus

The goal of the education sector during the 2012-2015 NIF III shall remain similar to those stated in the SNDP, namely, *Increase equitable access to quality education and skills training to enhance human capacity for sustainable national development*. In the context of this goal, the strategic focus of the Education and Skills sector, as specified in the SNDP, "...will be on expanding access to primary, secondary school, TEVET and tertiary education. Further, efforts will be made to improve the quality of education at all levels so that appropriate skills, knowledge, attitudes and values required for social and economic development are imparted to the learners. Special attention is planned for curriculum review at primary, secondary, and technical vocational levels as well as more equitable deployment and retention of teachers in rural areas. Furthermore, the Ministry has identified school feeding as one of the key strategies to increase access, efficiency and equity to quality ECE and primary education.

The strategic focus of the Ministry combines the policy aspirations of the new government as articulated in its manifesto and policy aspiration outlined in *Educating Our Future, Vision 2030* and the *Sixth National Development Plan (SNDP)* that runs from 2011 to 2015. The strategic approach also embraces factors that have a direct bearing on the education system. They include HIV and AIDS, gender, disability, orphans and vulnerable children (OVC) and illiteracy.

Broad Objectives

The following are the broad objectives of the Ministry during the 2011 to 2015 NIF III period:³

- (a) To increase access, efficiency and equity to quality ECE and Primary Education;
- (b) To increase access, efficiency and equity to quality Secondary School education;
- (c) To increase the number of qualified and competent teachers in schools ;
- (d) To increase access to science, technology and innovation;
- (e) To increase access, participation and equity in the provision of quality university education;
- (f) To increase efficiency and equitable access to quality TEVET;
- (g) To increase Adult Literacy levels;
- (h) To expand and improve infrastructure; and
- (i) To review the curriculum at all levels to make it relevant and responsive to national aspirations and education needs.

Early Childhood Education

All children have the right to survive, to develop to the full, and to enjoy a safe, healthy and happy childhood. They have the right to healthy physical and emotional development, and to live, learn and be full and respected members of society. As infants, young children or teenagers in Zambia, like others in the entire world, share these rights which in turn will shape their future and the future of the country. Prior to NIF III ECE was primarily delivered through the private sector. However during the NIF III period the Ministry intends to play both a regulatory and implementation role. The following are the policy objectives of ECE during NIF III:

- (a) Secure quantitative and qualitative improvements in ECE service delivery through the provision of a system of guidelines, standards and a mechanism to put the rights and needs of all children at the centre of national development; and
- (b) Ensure that, as much as possible, children aged 3-6 years are allowed equitable access to ECE services. As stated in the SNDP, it is anticipated that 30 percent of children would, by 2015, enter primary education with quality ECE experience.

Primary Education

During the NIF III period at Primary School level, the Ministry will focus on the following:

- (a) Securing quantitative and qualitative improvements in education service delivery through *access, quality, equity, and efficiency* of the education system;
- (b) Introducing free and compulsory education for all learners from Grade 1 to Grade 7;
- (c) Developing a comprehensive, diversified and integrated curriculum;
- (d) Ensuring that Grade 7 completion rate is 100 percent (from current 85%);
- (e) Significantly improving learning outcomes in National Assessment Survey (NAS) at Grade 5;
- (f) Ensuring that no child enters school later than 7 years old (currently half of the 7-year olds do not start school on time); and
- (g) Reducing share of repeaters to below 5 percent (over 7 percent now).

³³ These are the SNDP objectives.

Secondary Education

At Secondary School level, the focus will be on the following:

- (a) Ensuring that the quality of Secondary School education is at acceptable level to meet local and international expectations;
- (b) Strengthening gender equity and parity within the Secondary School education system;
- (c) Developing a two tier education system at Secondary School level: one focusing on academics and another on skills and other development;
- (d) Introducing free and compulsory Secondary education (grades 8-12);
- (e) Achieving a transition rate of 90 percent from primary to Secondary School education by 2015; and
- (f) Increasing the transition rate for Grades 9-10 to 65 percent by 2015.

Technical Education, Vocational and Entrepreneurship Training (TEVET), Youth and Adult Literacy

Skills development shall remain the priority policy under TEVET and Adult Literacy in the light of the current challenges within the labour market in Zambia. The focus will be on the following:

- (a) Facilitating improved access to training from 16 percent of Grade 12 school leavers annually in 2011 to 40 percent by 2015;
- (b) Providing literacy and functional literacy education to the functionally illiterate adults and youths, focusing more on skills development;
- (c) Creating exclusively Science and technical schools, colleges and universities;
- (d) Promoting collaboration between industry and TEVET institutions;
- (e) Improving and expanding facilities for teaching Science and technical subjects; and
- (f) Reducing student-lecturer ratio to 20:1 in TEVET.

Science Technology and Innovation (STI)

In the area of Science, Technology and Innovation, the prime focus will be on the following:

- (a) Giving priority to the teaching of science and technological subjects in educational institutions at all levels;
- (b) Promoting research and innovation; and
- (c) Promoting collaboration between industry and research institutions.

Teacher Education, Supply and Management

In the area of Teacher Education, Supply and Management, the Ministry will focus on the following:

- (a) Facilitating and providing quality and development-oriented teacher education programmes;
- (b) Expanding the capacity of teacher education (with particular focus on graduate teachers) through the public sector whilst providing incentives to private sector participation;
- (c) Reviewing and implementing appropriate methodologies in the areas of delivery of services targeting Learners with Special Educational Needs (LSEN); Guidance and Counselling services in schools and institutions of higher learning; Science and Mathematics in learning institutions; and the provision of quality library services in schools;
- (d) Establishing close link between teacher supply and teacher demand for Grades 1-12;
- (e) Ensuring that graduates from teacher training colleges are appropriately equipped with

-
- subject knowledge and pedagogical skills;
 - (f) Ensuring that over 95% of qualified graduates are deployed to teach at the level or in the subject for which they were trained;
 - (g) Improving school management through capacity building of school managers at Primary and Secondary levels;
 - (h) Reducing teacher absenteeism to increase pupil-teacher contact time; and
 - (i) Reviewing and implementing the teacher's rural retention scheme.

University Education

The government recognises the central role university education plays in fostering the economic and social development of the country. Whilst the role of university education is very important, reliance on public provision as the mainstay and public financing as the only source will be limited to the level of domestic revenue generated. Therefore, the Ministry will promote private participation in the provision and financing of university education. The policy of financing university education will therefore continue to be cost sharing as opposed to full cost recovery. During the phase of this plan, the Ministry will focus on setting up institutional frameworks and structures that will facilitate the provision of quality assurance and student loans. The focus in this area will also be on the following:

- (a) Increasing equitable access to quality university education;
- (b) Improving the general management and administration of universities, focusing, in particular, on strengthening financial management (accounting, procurement, auditing, and expenditure control);
- (c) Improving the conditions of service for academic staff in a manner that would address the challenges associated with current exodus of professionals from institutions of higher learning;
- (d) Developing infrastructure in partnership with the private sector to address rising demands for quality classroom/hostel/laboratory space;
- (e) Improving the learning environment through investment in laboratory equipment and related reagents/chemicals as well as in library facilities; and
- (f) Strengthening the capacity of the universities to undertake research.

Equity

The Ministry will encourage greater involvement of stakeholders, particularly Non-Governmental Organisations (NGOs) and line ministries, in the provision of quality education to the disadvantaged learners. In order to improve the academic performance of such learners, the focus of the Ministry will be on the following:

- (a) Increasing retention of both boys and girls in schools and reduce pregnancies;
- (b) Strengthening interventions for mitigating the impact of HIV and AIDs on learners and teachers;
- (c) Improving the provision of nutrition and health services;
- (d) Improving infrastructure for LSEN;
- (e) Improving funding for teaching and learning materials and equipment for LSEN;
- (f) Strengthening and integrating the concept of Education for Sustainable Development in Schools;
- (g) Improving identification, assessment and placement of LSEN; and
- (h) Improving policy guidelines on Special Needs and Inclusive Education.

Information and Communication Technology (ICT)

Zambia's ICT policy goal for the Education and Skills sector as stated in the National ICT Policy is

“To integrate ICTs in the Education system and develop the nation's Research and Development (R&D) capacity to support, facilitate and contribute to the development of key sectors of the economy including the development of appropriate local ICT products and services.”

The following are the main focus areas for ICT in the area of Education and Skills:

- (a) Deploying ICTs at all levels of the Zambian educational system in order to improve and expand access to education, training and research facilities; and
- (b) Strengthening the administration and decision-making capacity in the educational system through the effective usage of timely collected, analyzed and disseminated Education Management Information Systems (EMIS) data.

Part One

NIF III Context & Strategic Focus

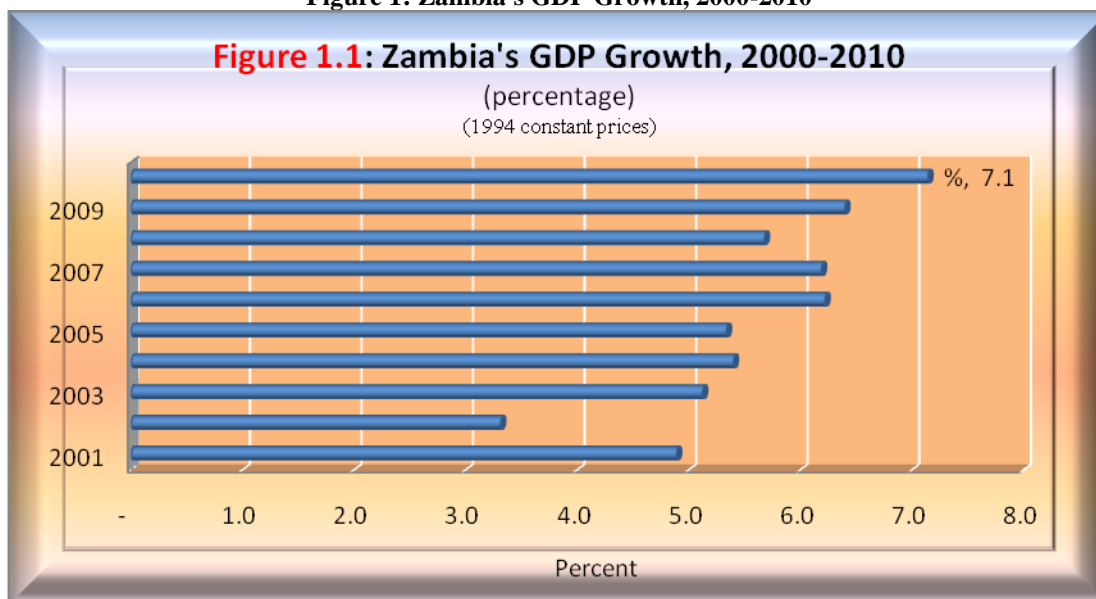
Macro and Sector-level Context

1.1 Macro-level Context

Zambia, until three decades ago, was one of the most prosperous countries in Sub-Saharan Africa. However, during the period covered by the last NIF (2008-2010), it was ranked as one of the Least Developed Countries. The Gross Domestic Product (GDP) growth rate fell from an average of 1.5 percent in the 1970s to 1.4 percent in the 1980s and 0.3 percent in the 1990s. Other economic indicators also pointed to the declining trends. Inflation, for example, had registered a steady increase over the years, rising, on average, from around 10 percent in the 1970s to about 70 percent in the 1990s. The increase in inflation, coupled with population growth which was above the GDP growth rate during the 1990s, resulted in a decline in real per capita income. In the recent past, Zambia registered significant improvements in the economic sphere. Since 2000, the country recorded an encouraging macroeconomic trend. With the GDP growth rate of 3.5 percent in 2000 and 5.2 percent in 2001, a brighter economic outlook emerged. For example, inflation declined from 30 percent in 2000 to 18.7 percent at the end of 2001, due mainly to evident prudent financial policies. Real GDP grew at 5.2 percent in 2005.

During the Fifth National Development Plan (FNDP) that covered the period 2006-2010, GDP growth averaged 6.3 percent per annum, compared with an average of 4.8 percent attained during the Poverty Reduction Strategy Paper (PRSP)/Transitional National Development Plan (TNDP) period (2002- 2005). Macroeconomic stability, growth and overall improvements in the investment climate had a positive impact on economic growth. Figure 1 presents GDP growth pattern during the decade 2000 to 2010.

Figure 1: Zambia's GDP Growth, 2000-2010



Source: Ministry of Finance and National Planning

The average annual growth over the FNDP period (which also covered the implementation of NIF II), albeit positive, was below the Plan's envisaged growth target of 7.0 percent. This outcome was partly due to the weak performance of key sectors such as agriculture, manufacturing and tourism, as well as due to the effects of external factors. Annual inflation was also reduced during this period, averaging 11.3 percent, compared to 20 percent during the PRSP/ TNDP period. The reduction in inflation was, nevertheless, below the FNDP single digit target, largely on account of the adverse effects of crude oil prices over the 2006/2007 period and the global economic recession during 2008/2009. As at December 2009, the stock of domestic debt increased by 23.5 percent at an estimated K10,520.6 billion, from K8,517.3 billion at the end of December 2008.

In 2010, the last year of NIF II implementation, budget performance was broadly satisfactory although overall budget deficit was 0.9 percentage points above the projection of 2.4 percent of GDP. Real GDP during the year grew by 7.6 percent, compared to the 7 percent target for the FNDP. In terms of value addition at constant 1994 prices, real GDP increased to K 4,312.6 million in 2010 from K 4, 007.7 million recorded in 2009. Growth was mainly driven by the agriculture, mining, manufacturing, transport and communication sectors. Single digit inflation was sustained in 2010 at 7.9 percent although it fell short of the FNDP target of 5 percent. The out-turn in inflation was attributed to the low food prices arising from the bumper harvest registered in the year and favourable commodity prices on the international market. In line with low inflation, a slight reduction in commercial banks' lending rates was registered. The average lending rate decreased to 26.4 percent at the end of December 2010, from 29.2 percent at the end of December 2009.

Notwithstanding the improved economic performance since 2001, Zambia has not significantly reduced poverty. According to the latest comprehensive Living Conditions Monitoring Survey (LCMS) that was undertaken in 2010, 60.5 per cent of Zambia's population lived below the poverty datum line, with rural poverty levels at 77.9 percent. Extreme poverty stood at 42% of the total population. Income distribution remained highly unequal, resulting in worsening human deprivation as demonstrated by the decline in the country's Human Development Index (HDI). This has translated into very low record of life expectancy at birth. Zambia's high HIV and AIDS prevalence rate, along with malaria and other infectious diseases, contributed to the high mortality rate.

The changing structure of growth also influenced the regional distribution of poverty. One explanation for the weak growth/poverty relationship is that growth had been concentrated in mining, wholesale and retail trade and construction, which are mostly urban-based and capital intensive. These sectors failed to generate sufficient employment due to weak linkages with the rest of the economy. Poor infrastructure development in rural areas also reduced opportunities for gainful employment in both the formal and informal sectors for rural dwellers. Moreover, the weak growth of the agricultural sector continued to explain why poverty incidences remained highest among the rural small-scale farmers. During the 2006-2008 period, for example, overall poverty levels in the country reduced marginally, mainly on account of a reduction in urban poverty. However, rural poverty maintained its upward growth trend.

Worsening poverty levels negated Zambia's economic growth during the FNDP, a factor that greatly challenged opportunities of attaining both the Education for All (EFA) Goals and the Millennium Development Goals (MDGs).

1.2 Education Sector Budget Performance: 2008-2010

The National Implementation Framework (NIF) III builds upon the successes of, and lessons from, NIF II. The total budget for the education sector (domestic and external resources combined) was K2,043.4 billion in 2006, the first year of FNDP implementation. Government allocation for the Ministry of Education in that year was K1,273.2 billion. Of this, K1,269.6 billion was released to the sector during the year, representing 96.5 percent of the budgeted amount. From the released amount, 71 percent went to personnel emoluments of teachers and teacher recruitment. Pooled donor funding disbursement for 2006, amounting to K205.5 billion, exceeded the budget of K195.3 billion due to favourable exchange rates. It is noteworthy that 62 percent of these funds went to education boards while the rest went to infrastructure development, education materials and activities at Headquarters. Analysis of the distribution of budgeted resources for the education sector in 2006 by sub-sector showed that ECCDE was allocated 0.46 percent; Basic Education 18.43 percent; High School 6.5 percent; Tertiary 10.63 percent; and Management and Administration 64.23 percent.

In 2007, the FNDP budget for the education sector amounted to K2.023 trillion. Resources available from both external and domestic sources were only K1.916 trillion (K1, 616 billion from GRZ and K300.5 billion from external sources). This created a funding gap of K106 billion. Personal Emoluments (PEs) accounted for K1.010 trillion, and non-PEs stood at K911 billion. The 2007 budget had two priorities: infrastructure development and the provision of education materials.

Allocations by programme of the 2007 budget show that the highest allocation went to Management and Administration (58.73 percent), which included PEs that accounted for over 50 percent of this amount; Infrastructure Development (17.54 percent); Research and University Education (12.8 percent); Curriculum Development and Education Materials (5.25 percent); Equity (3.97 percent); Standards and Assessment (1.2 percent); Teacher Education (1.01 percent); and Distance and Open Learning (0.22 percent).

The budget requirement for 2008, the first year of NIF II, amounted to K2.147 trillion of which K1.878 trillion was planned to come from domestic resources and K268 billion from external sources. However, the actual commitment from external sources was only K223 billion. This caused a funding gap of K58 billion. In terms of allocation to the programmes in 2008, this followed the same pattern as for the previous year with Management and Administration taking the highest allocation while Distance and Open Learning receiving the lowest.

From 2006 to 2010, funding to the sector steadily increased from 2.9 percent of GDP to 3.5 percent, which resulted in a marked expansion of infrastructure and subsequent increase in access to education at all levels, especially Basic Education. Since the introduction of the Free Basic Education Policy in 2002 the number of children accessing Basic Education has increased by over one million. Consequently, the attainment of Universal Primary Education is on track in Zambia. Despite the positive developments highlighted above, a number of challenges still remain. Critical among them are the following:

- (a) Insufficient infrastructure and desks;
- (b) Inadequate teaching and learning materials;
- (c) Low learning achievement in early grade literacy and numeracy;
- (d) Low learning achievements especially in Science and Mathematics;
- (e) Low teacher motivation resulting in high teacher absenteeism;
- (f) Low capacities to utilise available data for effective planning and decision making;
- (g) Co-ordination of key stakeholder mobilisation and participation;

- (h) Delayed disbursement of funds;
- (i) Ineffective teacher supervision and management;
- (j) Delays in updating and reviewing the curriculum at Primary, Secondary and TEVET levels;
- (k) Inadequate transport at lower levels; and
- (l) Inadequate use of data for evidence-based decision-making including planning, budgeting and monitoring and evaluation.

In spite of the significant successes scored in the education sector that suggest the likelihood of the country attaining a good number of MDGs in this area, the Mid-Term Review (MTR) of the FNDP identified several outstanding challenges. The matrix presented in Table 5 below shows the MTR's main findings and the recommended courses of action.

Table 5: Main Findings and Recommendations of the FNDP Mid-Term Review

Table 5: Main Findings and Recommendations of the FNDP Mid-Term Review	
Outstanding Challenges	Recommendation
Resource Allocation Pattern within the Sector	
The budget performance for the sector revealed major disparities in the allocation of funding between core programmes. Management and Administration took up a significantly large share of the education sector, a state of affairs that has serious implications for service delivery at the level of the core business of the Ministry. Without expenditure reorientation, the sector is unlikely to meet its major objectives.	<ul style="list-style-type: none"> (a) The Ministry should reorient its budget structure in a manner that reflects resource allocation priority to the core programmes in the sector. Presently, Management and Administration takes up a disproportionate share of the total sector budget, leaving little resources to the actual programmes. (b) The allocation to university education is woefully insufficient to meet qualitative and quantitative improvements especially in the light of the reluctance on the part of Government to transfer a significant amount of the cost of delivery to the users of university services (students). In this regard, it is recommended that more resources be allocated to tertiary-level education while at the same time gradually increasing tuition and related fees.
Teacher Recruitment, Deployment, Retention & Training	
Despite the efforts made in teacher recruitment, there is still a shortage of teachers in the sector. The high teacher attrition rate outstrips the effort of recruitment as more teachers are still required and yet clearance of backlog of graduates waiting to be absorbed in the system has been slow. Moreover, the mode used to advertise teacher recruitment is not conducive for rural areas as most areas are not informed in time.	<ul style="list-style-type: none"> (a) Need to revert to the old system of recruiting teachers from their teacher training colleges. (b) Teachers should be bonded for two years to serve in the rural areas at point of recruitment.

Table 5: Main Findings and Recommendations of the FNDP Mid-Term Review

Outstanding Challenges	Recommendation
Difficulties in retaining teachers in rural areas as most of them demand for transfers within two months of deployment. Allowances have been unattractive and insufficient to meet demand.	<p>(a) Need for the Ministry to build more houses for teachers, particularly in rural areas.</p> <p>(b) There is need for a comprehensive retention strategy which brings together various efforts. In this light, sponsorship for further training should give priority to teachers in rural areas as a measure to encourage more teachers to work there. Similarly, there is need to improve incentives to keep qualified teachers, particularly degree holders, in the worst-off areas.</p> <p>(c) The situation of female teachers in rural areas requires special attention. A study to evaluate the challenges and possible improvements at this level should be commissioned.</p>
There is no CPD for teacher educators who need frequent updating on their respective pedagogy. Quite often, teachers who pursue higher qualifications do not take courses related to their teaching subjects.	Sponsorship for advanced training should be tied to teachers' areas of specialisation.
Textbooks	
There is insufficient allocation of resources for textbook procurement. Textbook procurement manual is not readily available. In addition, textbook procurement is not always based on actual need in terms of subjects, titles and quantities	<p>(a) More resources should be earmarked for textbook acquisition in order to meet demand.</p> <p>(b) There is need to streamline the current textbook procurement and distribution procedures. Decentralised procurement of education materials to school level has proven to be more effective in delivery and cost and is hereby recommended. A decentralised procurement study should, therefore, be commissioned to recommend the best way forward.</p> <p>(c) A more refined system that tracks books per grade and per subject should be developed</p>
Classroom Infrastructure	
Demand for additional infrastructure is still high as schools are far apart, especially those for Upper Basic and High School	A more comprehensive approach to infrastructure development is required and should include toilets, water, desks and staff houses.
Quantitative improvement at High School Level	

Table 5: Main Findings and Recommendations of the FNDP Mid-Term Review

Outstanding Challenges	Recommendation
The quality of education at the Upper Basic and High School levels has suffered from under-funding due to the long period of bias in favour of basic education	In the context of growing enrolments in Basic Education, there will be need to focus on the expansion of other levels of education, particularly upper basic and high school education and consider developing complementary strategies for tertiary-level education
Equity concerns: Community schools and HIV & AIDS	
There has been proliferation of community schools with modest means and lack of basic inputs. This has compromised the quality of education. Consequently, one of the main challenges is the improvement of the quality of education in community schools, particularly at the Primary level. Presently, there is insufficient guidance from HQs on the implementation of Guidelines on Community Schools. As a result, DEBS have been providing inadequate guidance to community schools	The Ministry should put in place clear and comprehensive Guidelines on community schools.
Mainstreaming HIV and AIDS has remained a major challenge.	The Ministry should pay greater attention to mainstreaming HIV and AIDS in the education system
Early Childhood Care and Development Education (ECCDE)	
ECCDE is underfunded and the modalities of engagement between the state and the private sector are yet to be fully explored and/or exploited for the maximisation of both qualitative and quantitative improvements of the sub-sector	<p>(a) ECCDE sub-sector is still relatively new in the Ministry and as such the government needs to play a more critical role in advocacy, developing standards, curriculum, quality assurance and monitoring, and evaluation. Public sector financial support also requires to be targeted at the most needy children, with emphasis on fostering partnerships with other stakeholders, including the served communities.</p> <p>(b) Modalities for effective partnerships and alliances with the private sector in the delivery of ECCDE services should be developed and operationalised.</p>

1.3 Education Sector Budget Performance: 2010

An analysis of 2010, the last year of NIF II implementation, sheds light on the point from which NIF III begins.⁴ During 2010, the education sector was allocated the all-time highest proportion

⁴ The analysis below relied on the FNDP's 2010 Annual Progress Review.

of 19.9 percent of the national budget, compared to 16.1 percent for 2006, 15 percent for 2007, 15.4 percent for 2008 and 17.2 percent for 2009. In the 2010 Ministry of Education budget, 90.2% came from Government while 9.8 percent from CPs. The total budget for the education sector during 2010 stood at K3,733 billion, compared to the FNDP figure of K 2,976 billion, which resulted in funding surplus of K757 billion. Actual expenditure in 2010 was K3,446 billion, or 92 percent of the amount budgeted for during 2010. Table 6 presents the education sector's expenditure by programmes during 2010, for both internal and external resources.

Table 6: Budget Performance, Education and Skills Development Sector, 2010

Table 6: Budget performance, Education and Skills Development sector, 2010				
(K 000)				
Programmes		Budget	Actual	Percentage (Actual against Budget)
Administration	Policy & Planning	27,778,571	22,290,400	80
	HR & Administration	26,832,762	27,918,105	104
	Financial Management & Audit	7,241,524	6,213,115	86
	Procurement	6,343,961	3,456,874	54
	Institutional Management	771,497	1,332,167	173
	Grants and other payments	151,777,147	76,084,449	50
Infrastructure Development	Infrastructure	880,171,433	887,935,856	101
Equity	Special Issues	62,524,958	15,551,020	25
Teacher Education	Teacher Education	17,466,946	5,995,630	34
	Prov/Dist Resource Centre	301,750	189,112	63
Distance Education & Open Learning	Distance Education	4,271,604	2,531,944	59
Standards and Assessment	Standards	8,603,147	4,841,850	56
Curriculum Development & materials	Curriculum & Assessment	47,535,282	21,065,896	44
	University	399,634,985	262,100,913	66
Personnel Emoluments	Personal Emoluments	2,092,540,140	2,109,334,918	101
Total		3,733,795,707	3,446,842,249	92

1.4 Education Sector Programme Performance 2008-2010

The education sector performed fairly well during 2010 across most of the programmes. Positive developments were particularly noteworthy under the programmes of Infrastructure Development and Equity.

1.4.1 Infrastructure Development

In 2010, 4,050 classrooms were constructed using the community mode where the Government and the community pooled their resources together. The sector continued the construction of 47 High Schools, commenced in 2008, under the contractor mode. During the year, the sector also embarked on the construction of 22 new High Schools bringing the total to 69 High Schools under construction. Furthermore, in order to increase the number of university graduate teachers, the sector upgraded infrastructure at the Copperbelt College of Education (formerly COSETCO)

and Nkrumah College of Education to university college standards. In order to address the shortfall of Mathematics and Science teachers, the sector invested in the expansion of infrastructure at Mulakupikwa College of Education.

1.4.2 Equity

The sector continued sensitizing parents and communities about Learners with Special Education Needs on their potential to excel. This intervention saw an increase in the number of learners with Special Education Needs (SEN) from 168,866 in 2009 to over 220,000 in 2010 at Basic Education level. At High School level, the number increased from 3,732 in 2009 to over 6,000 in 2010. In the same year, the major achievement of the School Health and Nutrition (SHN) Programme was the development of a Home Grown School Feeding Plan (HGSFP). The Plan aims to facilitate the transformation of existing School Feeding Programme (SFP) into a locally driven and more sustainable system. It is worth observing that there were 756,600 Orphans and Vulnerable Children (OVCs) who were in school during 2010 out of which 126,284 were on the Bursary Scheme, a state of affairs that underscore the outstanding challenge ahead. Overall, Table 7 presents the education sector Key Performance Indicators (KPIs) monitoring system results during the FNDP period, the last three years of which were covered by NIF II.

Table 7: Sector Indicator Monitoring and Evaluation System for FNDP

Table 7: Sector Indicator Monitoring and Evaluation System for FNDP								
		Baseline	Annual Achievements					
		2005	2006	2007	2008	2009	2010	2011
Net Enrolment Ratio (%)								
Grades 1-7	Planned	93	95.6	97.6	98	98	97.3	
	Actual	M=95.25 F=95.88	96.59 98.28	102.50 102.33	104.27 105.15	100.14 102.62	99.16 102.04	
Grades 8-9	Planned	23.5	25.8	28.3	28.6	32.9	33.2	
	Actual	M=24.7 F=23.9	26.8 24.9	28.7 28.0	28.09 28.01	30.19 29.93	30.65 30.44	
Grades 10-12	Planned	21.32	22.22	24.55	25.52	28.7	33.2	
	Actual	M=24.63 F=18.51	25.47 19.03	27.54 21.60	28.77 22.30	29.75 22.96	31.33 23.86	
Completion Rate (%)								
Grades 7	Planned	80	85.9	86.5	90	91	90	
	Actual	M=88.34 F=74.94	91.16 79.46	96.93 84.43	100.86 88.59	97.14 86.26	105.67 115.22	
Grades 9	Planned	43	46.7	47.3	48	50	65.4	
	Actual	M=46.77 F=39.43	47.19 39.25	50.73 43.32	55.72 46.76	56.24 47.76	59.75 51.67	
Grades 12	Planned	17.55	17.65	22.24	23.97	24.4	25.55	
	Actual	M=20.32 F=15.18	20.61 14.75	22.24 17.22	25.03 18.93	21.9 16.98	25.67 19.83	
Pupil Teacher Ratio								
Grades 1-4	Planned	80.3	76.3	72.1	71.6	67.3	66.5	

Table 7: Sector Indicator Monitoring and Evaluation System for FNDP								
		Baseline	Annual Achievements					
		2005	2006	2007	2008	2009	2010	2011
	Actual	80.6	76.3	75.1	71.5	75.6	75.6	67.1
Grades 5-7	Planned	37.5	36.3	35.8	34.8	32.4	31.8	
	Actual	37.4	36.3	35.8	34.8	35.4	36.1	38.9
Grades 8-9	Planned	32.5	32.2	32.6	32.2	31.7	30.8	
	Actual	32.4	32.2	32.6	32.2	33.9	34.3	38.7
Grades 10-12	Planned	21.7	20.3	19.4	18.7	19.3	37.2	
	Actual	21.8	20.3	19.4	18.7	20.2	21.1	47.7
Gender Parity Index								
	Planned	0.95	0.97	0.97	0.98	0.99	1	
Grades 1-7	Actual	0.96	0.97	0.96	0.97	0.98	1.004	0.989
Grades 8-9	Planned	0.85	0.88	0.9	0.92	0.94	0.97	
	Actual	0.89	0.86	0.90	0.88	0.88	0.881	0.859
Grades 10-12	Planned	0.84	0.86	0.87	0.82	0.83	0.82	
	Actual	0.84	0.80	0.83	0.82	0.83	0.794	0.821
Grade 9 examination % Selected	Actual male	35.14	36.86	55.63	40.56	47.09	48.92	55.15
	Actual female	37.69	39.19	44.78	38.94	44.37	44.41	49.24
Grade 12 examination pass rates	Actual male	61.44	64.27	63.52	63.43	55.6	61.76	62.21
	Actual female	50.84	57.03	57.38	57.97	47.8	56.50	57.87

Source: 2010 Annual Review of FNDP

One of the MDGs that are of particular significance for the education sector is Goal number 2, namely, *Achieve Universal Primary Education*. The target is to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. All the three indicators for this target performed quite well against the baseline year of 1990. For example, Zambia made significant progress towards the realisation of Universal Primary Education by 2015 and the elimination of gender disparity in primary education. Enrolments rose by over 1,500,000 learners at Basic School level between 2002 and 2010 and the proportion of females enrolled at that level was close to 50 percent. In addition, the completion rate at Basic School level was over 90 percent. However, gender parity in secondary schools and tertiary institutions remained a challenge between 2002 and 2010. However, the Grade 7 completion rate has significantly improved due to the introduction of free Basic Education and the removal of cut-off points. At Grade 9 the completion rate also increased from 35.3 percent to 52.7 percent between 2002 and 2009. Although the rate was quite low, this was a significant increase considering that it rose by 17.4 percentage points. The completion rate for girls, however, slightly lagged behind that for boys. The completion rate for Grade 12 also improved.

A number of lessons that have direct relevance to the Ministry, in general, can be derived from the performance of FNDP-cum-NIF II during the 2006-2010 period. The following are particularly important:

-
- (a) Expansion of school infrastructure, if not matched by a corresponding recruitment of teachers, worsens pupil teacher ratios;
 - (b) The continued implementation of the free basic education policy at primary school level since 2002 exerts pressure on the limited infrastructure at post primary levels;
 - (c) A mismatch between demand and supply of teachers is not good for balanced educational services delivery; and
 - (d) The unreliability of some key statistics, such as Net Enrolment Rate (NER) and Net Intake Rate (NIR), two of the key indicators, leads to inaccurate assessment of progress of set development targets.

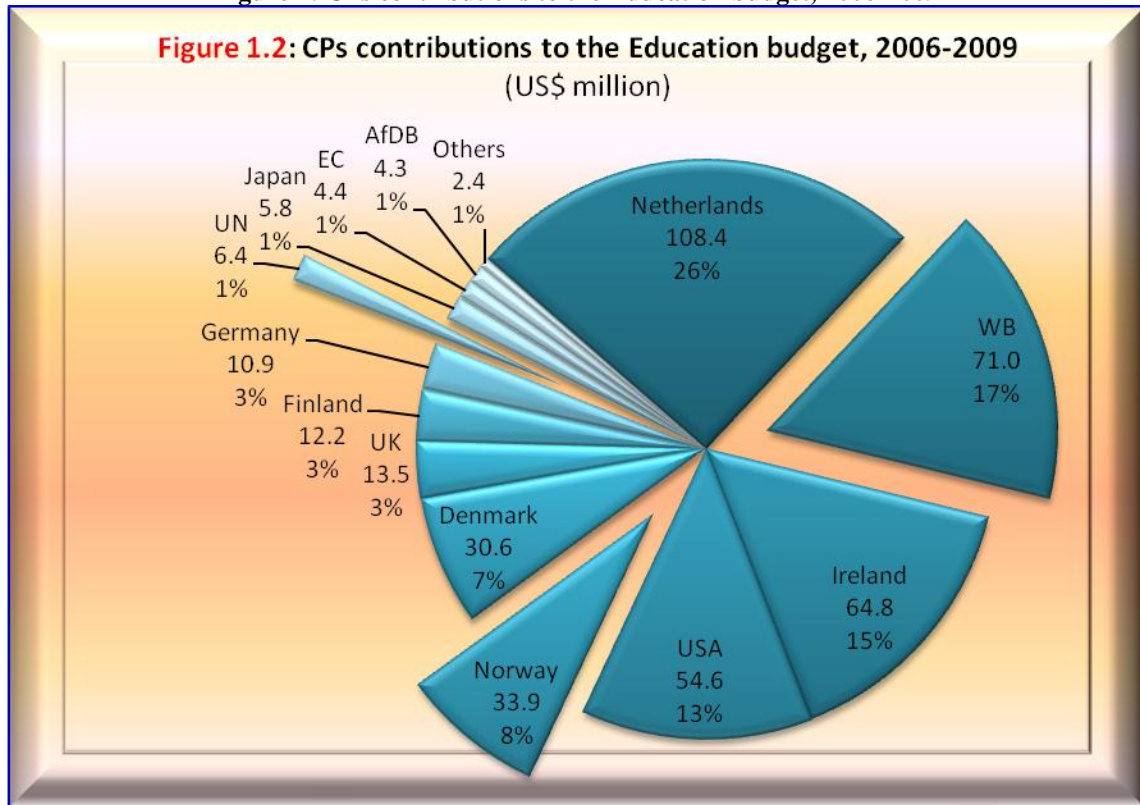
1.5 Co-operating Partners and the Education Sector during FNDP

1.5.1 Overview

Of Zambia's main sectors, Education and Skills is the one which has consistently received the highest volume of external aid. The sector remained the most important recipient throughout the 2000s even after the Government, with the support of the JASZ process, actively 'decongested' what was considered to be a sector that had too many active donors. It is, however, important to note that, since 2009, the number of 'education donors' had fallen to a low of 4-5 active CPs. Without the US\$30 million per year of FTI (now GPE) funding in 2009 and 2010, the basket fund would have shrunk considerably as some of the larger CPs migrated to PRBS while a handful of smaller- and medium-sized CPs, such as Canada and Finland, had entirely withdrawn from the sector. Notwithstanding this, the Education sector remained the second largest recipient of external aid from CPs during the FNDP period. Over the 2006-2009 period, the Netherlands accounted for 26 percent of external aid flow to the sector, followed by the World Bank, Ireland and USA at 17 percent, 15 percent and 13 percent, respectively. During the five years of FNDP, the Education sector received US\$ 423.1 million from CPs, which was close to 90 percent of the FNDP planned allocation. Figure 2 shows the contributions by different CPs to the education budget over the 2006-2009 period.

The formalisation of the JASZ brought several positive changes in the Education sector in Zambia. The JASZ-inspired Division of Labour (DoL), for example, improved co-ordination and harmonisation in the sector. By 2010, the number of active CPs had reduced from 12 in 2005 to only 4-5 CPs regularly participating in meetings.

Figure 2: CPs contributions to the Education budget, 2006-2009



Source: Ministry of Finance and National Planning

1.5.2 Education SWAp

Sector Wide Approaches (SWAp) are increasingly a feature of the Programme Based Approaches in Zambia. There is no precise definition of SWAp as this is a difficult concept to comprehensively define. In the case of the Education and Skills Sector in Zambia, SWAp is a process and is currently a ‘work in progress’. Overtime, three core notions, which are Ownership, Coordination and Cohesion, have come out as the basis on which SWAp is being implemented in Zambia.

A Memorandum of Understanding (MoU) was entered into between the Government and Cooperating partners in 2003 that formed the basis of harmonising around the education SWAp in the context of the Ministry of Education Sector Plan (MESp). This five-year SWAp was a follow-up to the implementation of the Basic Education Sub-Sector Investment Programme (BESSIP).

Since inception in 2003, SWAp has been conceptualised as the framework under which the Education Reforms are being implemented in Zambia. The major thrust of SWAp was to move away from project to sectoral approaches hinging on clearly defined concepts, working arrangements and policy issues. Further, the Ministry sought to fully integrate special programmes and to mainstream relevant cross-cutting issues in the sector under the context of SWAp.

SWAp takes a holistic development view of the sector and allows the pooling of domestically and internationally generated resources with a view of enhancing co-ordination of revenue and expenditure. It also helps in improving the Government’s management of resources in accordance with national priorities as defined in the National Implementation Frameworks

The 2008 Education Public Expenditure Tracking Survey (EdPETS) and an earlier tracking exercise from 2007 documented major inefficiencies with the current sector pool by having a dual planning, accounting and reporting system for government and donor funding from Headquarters down to the school level. Based on the findings of the EdPETS, a Fiduciary Risk Assessment (FRA) was undertaken in August 2008 to explore ways to improve the sector pool and proposed a more efficient channel for donor funding, including those from FTI.

The main recommendation of the FRA was to move the sector pool to “targeted budget support”, also known as “sector budget support”. In essence, this modality entails that donors continue to provide un-earmarked contribution in support of the NIF instead of full-fledged general budget support. However, rather than disbursing to a Ministry managed account with specific accounting and reporting requirements, as in the current pool, donor funds would be mingled with Government funding to finance any activity in the mutually agreed Annual Work Plan Budget (AWPB). This modality would attempt to address both the identified weaknesses in the current pool and reap the efficiency gains from closer alignment of donor support to Government systems, as outlined in Zambia’s own Aid Policy and in line with the Paris Declaration.

The FRA concluded that the transition from the sector pool to “targeted budget support” would not imply higher fiduciary risks for Co-operating Partner support, but on the contrary, would reduce risks currently inherent in the pool. This, however, is predicated on the implementation of modified accounting and financial reporting systems, such as Integrated Financial Management Information System (IFMIS) as well as enhanced ex-post reports (both external audits and selected procurement audits).

The idea was to ensure that this should first of all be designed to serve the needs of the Ministry, but would also serve to inform donor requirements for accountability. The intended transition was to be accompanied by a capacity building program that was meant to have three components:

- (a) Financial reporting: enhancement of internal audit to focus on systemic issues, rather than pre-payment audit; focus on accounting staff; development of modified financial reporting formats and production of a simple and updated accounting manual;
- (b) Procurement: production of updated procurement guidelines; additional qualified staff; substantial training for staff in technical directorates and at lower level; technical assistance to support procurement at lower levels; studies on specialist procurement areas, such as textbooks, infrastructure, Technical Assistance (TA); and
- (c) Audit: continuation of current financial support to the Office of the Auditor-General to carry out annual audits at lower levels.

With respect to allocations that were made through the sector pool, Table 8 shows that funding for the Education SWAp increased from US\$58.35 million in 2006 to US\$84.14 million in 2007; declined to US\$67.3 million in 2008 before it substantially increased to US\$102.31 million in 2009. In 2010, Education SWAp received a significantly reduced flow from CPs, at US\$32.8. Denmark reduced its funding by 94 percent from US\$8.4 million in 2009 to US\$0.5 million in 2010. The year 2008 saw a decline to US\$67.3 million largely due to the decision by four CPs (the UK, Norway, Finland and the European Union) to shift their disbursement modality to general budget support. The EFA-FTI and other CP support were withheld in 2010 due to concerns around financial management especially in relation to procurement and audit follow-up. In response to these concerns the Ministry and CPs jointly developed the Financial Management Action Plan (FMAP) of 2011.

Specifically, the Ministry of Education and the CPs agreed on the FMAP as a means of addressing some of the recurring financial management and accountability issues arising from the implementation of the education sector plan and the subsequent suspension of the pooled fund during the final stages of the NIF II implementation. The actions proposed in the FMAP are fully in line with the Government of Zambia rules and regulations for financial management as well as the recommendations in the audits of the Auditor General. It includes a six-monthly verification “health check” exercise to ascertain the extent of progress with implementing the agreed actions and to monitor the follow up on the recommendations by OAG. Health checks had been carried out in March and November 2011 and further regular health checks have become part of the PFM monitoring of the education sector. Table 8 below shows the status of education SWAp during the period 2006 to 2010.

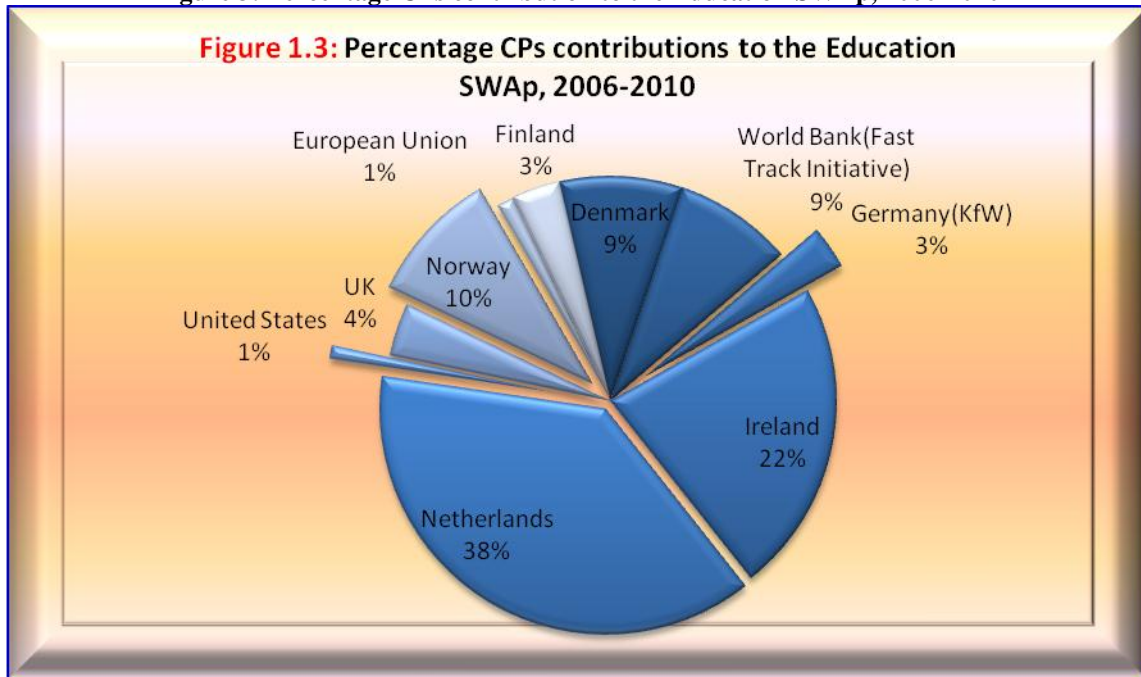
Table 8: Education SWAp 2006-2010

(US\$ million)						
	2006	2007	2008	2009	2010	Total
Denmark	0.0	9.6	5.6	8.4	0.5	31.1
World Bank(Fast Track Initiative)	0.0	0.0	0.0	30.1	0.0	30.1
Germany(KfW)	0.0	0.0	0.0	10.9	0.0	10.9
Ireland	7.1	15.5	22.1	20.1	14.5	79.3
Netherlands	17.75	29.54	36.9	31.81	17.8	133.8
United States	1.3	1.0	0.0	1.0	0.0	3.3
UK	11.2	2.3	0.0	0.0	0.0	13.5
Norway	16.1	16.	1.2	0.0	0.0	33.9
European Union	0.0	3.1	1.3	0.0	0.0	4.4
Finland	4.9	7.1	0.2	0.0	0.0	12.2
Total	58.35	84.14	67.3	102.31	32.8	352.5

Source: Ministry of Finance and National Planning and Cooperating Partners

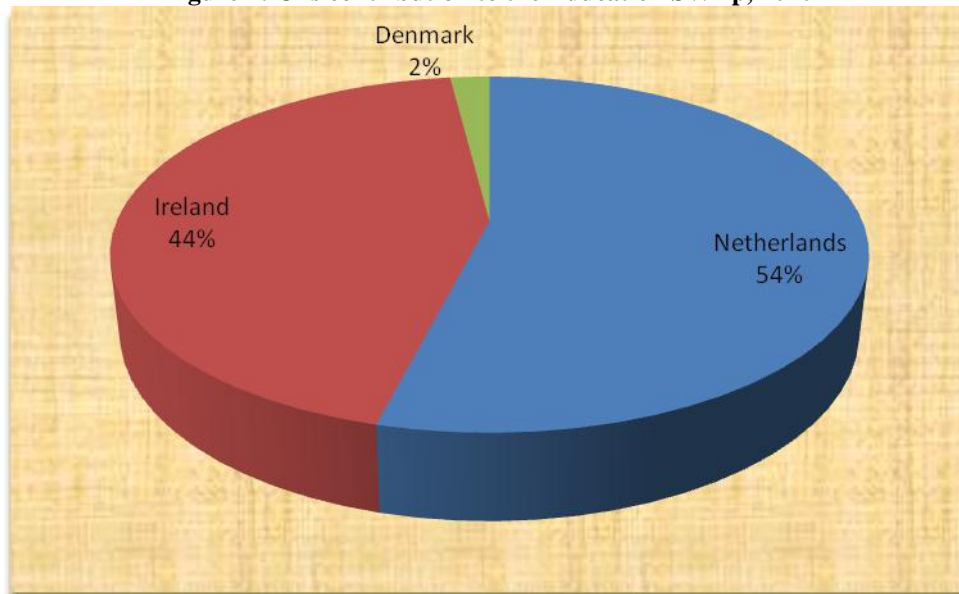
Ireland and the Netherlands were the two main contributors to the Education SWAp though their funding in 2010 was still less than that for 2009. Figure 1.3 graphically shows the contributions of the main CPs in the Education SWAp. Figure 1.4, in turn, reveals the dominance of Ireland and the Netherlands during the last year of FNDP/NIF II. The two CPs jointly accounted for as much as 98 percent of external contribution to the Education SWAp.

Figure 3: Percentage CPs contribution to the Education SWAp, 2006-2010



Source: Ministry of Finance and National Planning

Figure 4: CPs contribution to the Education SWAp, 2010



Source: Ministry of Finance and National Planning 2010

1.5.3 Project Modality

Project support has been recognised as a major funding modality in the education sector. In addition to CP support through the pool fund modality, during the FNDP period a number of CPs, both bilateral and multi-lateral, provided support through projects. These CPs included African Development Bank, EU, ILO, Ireland, JICA, UNICEF, USAID,

World Food Programme and World Bank. The projects covered such aspects as school construction, in-service teacher training, provision of teaching and learning materials, support to community schools, ICT infrastructure, support to School Health and Nutrition, and support to anti-HIV and AIDS interventions.

At the start of the FNDP, the value of project support was approximately 7% of the total external funding to the Education sector. By 2010 this had risen to 26%. For some activities, such as School Health and Nutrition and HIV and AIDS, the quantum of support through projects was greater than that from GRZ. It should be noted that a number of pool fund CPs, such as Ireland, Netherlands, Norway, and United Kingdom were also supporting projects implemented by national and international NGOs.

1.6 Role of Communities and Civil Society Organisations

The role of civil society organisations and communities during the implementation of the FNDP was clearly supportive and it is Government's wish to continue in this spirit. During the FNDP period, there were scores of national and international NGOs that were active in the educational sector; these (together with the churches and the private sector) were regarded as 'partners' in the sector. The majority of local and international NGOs predominantly used project support and/or provision of technical assistance in their co-operation. These organisations included Campaign for Female Education (CAMFED), Care International, Forum for African Women Educationalists of Zambia (FAWEZA), Plan International, Students Partnership Worldwide, VVOB, World Vision and Zambia National Education Coalition (ZANEC). Furthermore, the private sector has contributed to the development of education through the provision of infrastructure, teaching and learning materials and ICT. The support from NGOs was considerable. For instance, the support to bursaries for girls from CAMFED and FAWEZA combined was greater than that from GRZ.

A significant development in the Zambian Education sector since the 1990s has been the growth of 'community schools'. These are schools mostly at the primary sub-sector level, which have been set up by communities, usually in areas of socio-economic disadvantage, in response to the inability of Government and other education providers to provide education services in those areas. Essentially, therefore, these schools cater for children who cannot find places in the regular schools. Typically, community schools operate in poor infrastructure and the teachers are volunteers who are unsalaried and are mostly untrained. The number and importance of community schools continued to grow during the FNDP period from less than 50 schools in 1996 to 3,000 by 2009. These had an enrolment of approximately 500,000 pupils, which was almost 18 percent of the Basic School pupil population and about 8,000 teachers.

During NIF III, the relationship between Government and Non-State actors will have to be reviewed in the light of experiences from the past and also in the context of the current decentralisation policy which is important in strengthening institutions at the central level through to the lower levels. This is particularly necessary now when the current decentralisation approach involves devolution of government functions so that national developmental objectives are achieved through an improved, expanded and sustainable

governance system where central government, local authorities and communities would become mutually accountable during implementation.

1.7 Lessons from National Implementation Framework II (NIF II)

Four main lessons have been learnt from the implementation of NIF II. These are: registration of growth, polarisation of the growth-poverty relationship, fair performance of FNDP in terms of resource allocations to the education sector and significant contribution of CPs.

1.7.1 Registration of Growth

One noteworthy aspect from the macroeconomic overview discussed above is that Zambia is registering levels of growth that should allow it to increasingly depend on its own internally-generated revenue relative to what comes from external support.

1.7.2 Polarisation of the Growth-Poverty Relationship

The changing structure of growth, which is predominantly urban-biased and not pro-rural, has polarised the growth-poverty relationship, thus, explaining why, in spite of the recorded growth, rural poverty has remained a challenge. Given this situation, equity considerations are proving to be the most significant elements in addressing rural poverty. This entails the need to address with additional zeal (at both policy and strategy levels) the challenges of poor households in rural areas and how they continue to have lower levels of education access and quality, particularly for the girl-child who is traditionally given additional domestic chores. The poor rural infrastructure, including roads and electricity further worsen the rural-urban divide and bring to the fore the additional challenges that rural-based learners have to face. It also means that, even where there are opportunities for Zambia to reach some MDGs, on average, the rural child may remain underserved both quantitatively and qualitatively.

1.7.3 Fair performance of FNDP in resource allocations to education

The FNDP performed fairly well in terms of resource allocations to the Education sector during the Plan period. Notwithstanding this, to the extent that the biggest share of the Plan's budgetary resources for the Education sector went to Management and Administration, reforms of the Education sector that would focus on streamlining the management of educational services delivery could result in efficiency gains through the re-channelling of resources to the more critical needs of the sector without having to significantly alter the sectoral share of the total Government budget. The most critical areas that could benefit from efficiency gains include increased funding for Early Childhood Education; enhanced provision of school infrastructure; improved supply of adequate teaching and learning materials, which could result in improvements in achievements/performance especially in Science and Mathematics; more effective teacher supervision and management; and facilitation of transport. Overall, this calls for the Ministry, during NIF III, to reorient its budget structure in a manner that would reflect resource allocation priority to the core programmes and activities in the sector away from Management and Administration.

1.7.4 Contribution of Co-operating Partners

During NIF II Co-operating Partners contributed to the positive growth of the Education sector. The Education SWAp, as an approach for external support, positioned the Ministry in good stead to receive and manage external resources. There have, however, been changes in donor priorities and modalities of support that call for deeper reflection on how the sector should be supported.

The decline in SWAp CPs, as revealed more poignantly during 2010, means that educational financing approaches and modalities could experience a sea-change that could result in reduced external support and/or transformation in external resource receipt and management. The fact that the Netherlands (that accounted for 54 percent of 2010 SWAp contributions to the sector) and Denmark are exiting the country/sector means that new alliances/partnerships with ‘fresh partners’ should not only be sought but, perhaps more importantly, the modalities of support better defined during NIF III. The improving economic fortunes of the country, all things being equal, may also entail reduced donor inflows to the Education sector as the country enters the Lower Middle Income status. At the planning level, these developments require the Ministry to reposition itself in its relationship with CPs.

2.1 Background

During the FNDP period, the Ministry of Education and the Ministry of Science, Technology and Vocational Training operated as two separate ministries. With the coming into power of the new government, the ministries were merged into the Ministry of Education, Science, Vocational Training and Early Education. The merger was aimed at achieving the following:

- (a) Harmonising the planning of education delivery from the lowest to the highest level as previously the levels were not ‘speaking’ to each other as they were under different portfolios and ministries;
- (b) For easy targeting and improved budgeting of educational activities, thereby removing duplications; and
- (c) For easy monitoring, evaluation and reporting as this will be done under one umbrella.

The strategic focus of the Ministry combines the policy aspirations outlined in *Educating Our Future*, *Science, Technology and Innovation Policy*, *Vision 2030* and the *Sixth National Development Plan (SNDP)* that runs from 2011 to 2015. The strategic approach also embraces factors that have a direct bearing on the education system. They include HIV and AIDS, gender, disability, Orphans and Vulnerable Children (OVC) and illiteracy. With these considerations, the NIF III aims to improve the general quality of education provision specifically raising learning achievement levels as well as overturning inefficiencies.

With the change of Government in 2011, there has been a policy shift from the Basic Education (Grades 1-9) and High School Education (Grades 10-12) school system to Primary Education (Grades 1-7) and Secondary Education (Grades 8-12) school system. The change was necessitated by the challenges encountered in the previous education system such as the following:

- (a) The Primary Schools which had initially offered Grades 1-4, Grades 5-7 or Grades 1-7 and were converted to Basic Schools to offer Grades 1-9 or to High Schools to offer Grades 10-12 did not have the appropriate infrastructure such as laboratories, workshops, desks and other specialised rooms and facilities. This compromised the provision of quality education;
- (b) Some of the Primary Schools that were converted to Basic Schools did not have suitably qualified teachers to teach Grades 8-9 which required specialisation, hence the use of non-specialised primary school teachers in those grades. Equally, the Basic and Secondary schools that were converted to High Schools did not have qualified staff in some subjects and ended up utilising the same diploma holders to teach at High school;
- (c) There was wastage in some schools for teachers that were adequately qualified and posted to Basic Schools as most of them did not teach the required minimum standard number of periods, hence being underutilised;
- (d) The teacher education system was meant to train teachers for Grades 1-7, 8-9 and 10-12 and not for the Basic and High School education system;

- (e) Some schools, especially the grant-aided and private ones, resisted the change;
- (f) School management became a challenge in schools where the head teacher was less qualified (i.e. head teacher had certificate while some teachers had diploma or degree qualifications); and
- (g) The collection of fees was a challenge as pupils in Grades 1-7 were not paying while those in Grades 8-9 were required to pay.

During the NIF III period the strategic focus for the Ministry shall be in the Secondary School and Tertiary Sub-sectors, which had for a long time not received the much needed attention. During the NIF II period (2008-2010), Capital Expenditure estimates for 2010 for the High School Sub-sector were estimated at 17.14 percent, whereas for the NIF III this has been raised to 75.58 percent; an increase of 58.44 percentage points.

Primary Education on the other hand has seen a reduction from 69.14 percent in 2010 to 5.22 percent during the NIF III period. This shows a major paradigm shift in the Ministry's education policy. This will see more classroom space being created in secondary schools in part to cater for the Grade 8 and 9 classes that have been shifted from Basic to the Secondary Sub-sector. The capital expenditure information is summarised in Table 9 below.

Table 9: Capital Expenditure Resource Projections (NIF II and NIF III)

Programme	*NIF II 2010 Estimates	2010 % Allocation	2011-2015 Estimates	2011-2015 % Allocation	% Variance
ECCDE	2	0.23	0	0.00	-0.23
Basic (Primary) Education	605	69.14	347	5.22	-63.92
Secondary (High) Education	150	17.14	5020	75.58	58.44
Tertiary: Teacher Training	10	1.14	89	1.34	0.20
Tertiary: University	40	4.57	238	3.58	-0.99
Management and Admin	68	7.77	0	0.00	-7.77
Science and Voc. Training	0	0.00	948	14.27	14.27
Literacy Education	0	0.00	0	0.00	0.00
Total Capital Expenditure	875	100.00	6642	100.00	0.00

*Source: NIF II (2008 – 2010)

Zambia has participated in a number of regional and international forums that focused on how best to improve education service provision and some of these have made an important impression on the manner in which the country has redefined its goals, objectives and priorities for the education sector. The regional initiatives in which Zambia has participated include the Southern African Development Community (SADC) *Protocol on Education and Training* and the African Girls' Education Initiative (AGEI), a regional education programme which targets the girl-child.

At the international level, the most important ones that have conditioned Zambia's education policies are (a) the Education for All (EFA) initiative/process and (b) the Millennium Development Goals (MDGs). EFA is essentially a worldwide initiative that aims to improve education, based on the understanding that *education is a fundamental human right*. From the standpoint of the Government, the EFA goals and targets agreed upon at the World Education Conference in Jomtien provided hope for the development of basic education in Zambia and shall,

thus, continue to guide policy actions in the fields of education and training. These goals and targets are:

- (a) Expanding Early Childhood Care and Development activities, including family and community interventions, especially for poor, disadvantaged and disabled children;
- (b) Universal access to, and completion of Primary Education;
- (c) Raising the learning achievement levels;
- (d) Reducing the adult illiteracy rates;
- (e) Expanding the provision of basic skills education and training for youths and adults; and
- (f) Increasing the acquisition of knowledge, skills and values by individuals and families for better living and sustainable development, made available through all education channels including the mass media, other forms of modern and traditional communication, and social action.

While many developing countries reached many of the EFA goals set in Jomtien, a number of challenges remained outstanding, particularly in Sub-Saharan African countries, including Zambia. This realisation sets the stage for the 2000 World Education Forum in Dakar, Senegal, where the EFA initiatives were re-affirmed against the backdrop of the devastating effects of the HIV and AIDS pandemic, the impact of structural adjustment programmes and natural disasters. Zambia subscribed to the collective Dakar Framework of Action that was formulated with the following targets:

- (a) Expanding and improving comprehensive Early Childhood Care and Education, especially for the most vulnerable and disadvantaged children;
- (b) Ensuring that, by 2015, all children have access to, and complete free, compulsory, and quality Basic Education;
- (c) Ensuring that learning needs of young people and adults are met through equitable access to appropriate learning and life-skills programmes;
- (d) Achieving a 50 percent improvement in levels of adult literacy by 2015;
- (e) Eliminating gender disparities in primary and secondary education and achieving gender equality in education by 2015;
- (f) Improving all aspects of quality of education.

In order to achieve these goals, it was agreed that EFA forums shall be strengthened at the national, regional and international levels. For Sub-Saharan African countries, the EFA goals are expected to be realised through strategizing at the national level, complemented by concerted action at the African regional level. For Zambia, the Jomtien EFA Conference and the Dakar Framework of Action are understood as being rooted in fundamental values of basic human rights of every individual, which include:

- (a) justice, equity and fairness to all individuals;
- (b) obligation of the society to the educational needs of all its people;
- (c) the right of all people everywhere to Basic Education as a fundamental human right;
- (d) fair and equitable treatment of all learners - infants, children, youth and adults;
- (e) establishment of better learning environments;
- (f) promotion of learning achievement as a significant measure of real education opportunities; and
- (g) education as a basis for better living of individuals and communities.

Box 1 summarises the objectives, strategies and targets that were formulated for the EFA Regional Framework for Action.

Box 1: EFA Regional Framework for Action	
1. Priority areas of focus	<ul style="list-style-type: none"> (a) Improving access and equity (b) Improving quality and relevance of education (c) Institutional and professional capacity building (d) Improving partnerships
2. Strategic Objectives	<ul style="list-style-type: none"> (a) Transforming education for national and regional development goals with specific reference to social, cultural and economic and technological development (b) Transforming curriculum content and improving relevance, quality and teaching methodologies with the need of learners in focus (c) Transforming the role of the state and education system structures and functions for facilitating active participation of stakeholders in the lifelong learning processes (d) Building capacity in educational leadership, management, research and information systems (e) Strengthening partnerships with NGOs, civil society and development partners at community, and national, regional and international levels.
3. Basic strategies	<ul style="list-style-type: none"> (a) Review and harmonisation of existing policies and legislation, focussed at rights of disadvantaged groups and the creation of a culture of lifelong learning (b) Increase in financing and rationalisation of investment in education (c) Development of national, sub-regional and regional institutional capacities (d) Review of curricula and validation of African indigenous knowledge systems, values and skills (e) Improvement of capacities for educational change (f) Improvement of the teaching and learning environment, through development of materials, methodologies and social learning environments that are feasible, sustainable and relevant to the African learner (g) Adoption of appropriate and cost-effective technologies, including reducing the dependence on imported materials and increasing the use of the oral tradition (h) Promotion and support of Africa based educational research (i) Development of genuine and sustainable partnerships
4. Targets	<ul style="list-style-type: none"> (a) ECCDE Programmes - double by 2006 offering safe and stimulating environments. 100% access for 3-6 age group by 2015 (b) Primary education - By 2015: 100% access; 80% completion rate, of which 90% start at secondary level (c) Learning achievement - By 2015: all teachers have received initial training; operational in-service training programmes which are child-centred and gender-based. (d) Enhancement of education of girls and women – Increase admission, completion and transition rates of girls and remove legislative barriers; create safe learning environments for girls; institutionalisation of action in relation to access; implement awareness raising campaigns and training. (e) Reduction of adult literacy – Reduce illiteracy by 50% (f) Expansion of basic education and skill training for out-of-school learners – Conduct studies in next 2 years to assess situation of out-of-school children; based on these studies design of NFE programmes; bridging gap between formal education and NFE. (g) Development of HIV/AIDS programmes and mechanisms – life skills and HIV/AIDS education become part of education programmes; partnerships with civil society, media, communities; AIDS campaigning (h) Improving management and governance – Use of ICT; decentralisation and participation through capacity building at a lower level; produce strategic plan on management. (i) Increase budgetary allocation to education – By 2005: 7% of GDP spent on education; By 2010: 9%; international agencies should double their financial support (j) Institutionalise the assessment and monitoring functions of the EFA team – Establishment of Regional EFA Consultative Council; By 2000: work plan on regular assessment and monitoring

Four major principles capture the underlining spirit of Jomtien EFA objectives in Zambia and these shall continue to be used as the primary point of reference in all interventions in the

educational sector in the country. The first is *access*, which continues to emphasise commitment to universal provision of opportunities for a defined minimum level of education. Although this principle is often taken to be principally concerned with opportunities for the school-age population, the Government of Zambia maintains that it shall also embrace the provision for the adult population which, in the earlier years, did not have access to such opportunities.

The second target is *equity*, which stresses the need to ensure that the distribution and utilisation of opportunities in education would be fairly targeted in order to reach the disadvantaged groups in society. This target calls for specific measures and explicit strategies in favour of groups that had not been able to fully participate in the education process. Women, disadvantaged children, particularly OVC, the extremely poor people found mainly in rural areas, people with physical and learning disabilities, people in poorer regions of the country, etc., are all specifically targeted to allow them to equitably enjoy the rights and opportunities that are offered by education.

The third target regards *learning achievements*, which emphasises the need to focus on well-defined learning accomplishments as a major outcome of the education process. In NIF III, this principle shall strongly be linked to *relevance*, *effectiveness* and *efficiency* which, together, help to define the *quality* aspects of education.

Lastly, the principle of *partnerships* has emerged as an important consideration in educational service provision and is deriving its significance from the EFA goals and MDGs principles. As resources at the disposal of the Government dwindle against a tide of competing demands and ensuing global economic difficulties, the need to invite other providers to educational services provision is no longer an option; it is an imperative. Partnerships and alliances in service provision are also founded on the principles of democracy and inclusiveness that call for the direct involvement of both providers of, and beneficiaries from, the education system not only in meeting the cost of provision but also in directly participating in decision-making processes. For the Ministry, the main partners include Faith Based Organisations (FBOs), the private sector, Non-Governmental Organisations (NGOs), Community Based Organisations (CBOs), traditional leadership, communities, parents, and the different categories and levels of learners themselves. Included among stakeholders are Cooperating Partners (CPs) that are being called upon not only to provide complementary financial resources but also technical assistance so that most, if not all, goals under NIF III are achieved.

The MDGs have also set important targets that are essential to Zambia's Education sector development. The MDG number 1 (*Eradicate extreme poverty and hunger*); MDG number 2 (*Achieve Universal Primary Education*); MDG number 3 (*Promote gender equality*); and MDG number 6 (*combat HIV/AIDS, malaria and other diseases*) all set performance targets that are either directly related to educational service provision or the education sector is indirectly expected to play an important facilitative role. The achievement of universal primary education, for example, does set targets that are related to the EFA goals and, in this sense, also sets the tempo for Zambia in this area of intervention.

A number of important initiatives have been taken at the national levels that significantly influence the Government's policies and strategies in the educational sector. Cabinet approved in 1992 the *Focus on Learning* policy document that stressed improvements in access, equity, efficiency and quality of education through rehabilitation of school infrastructure, construction of new schools, training of education managers, and procurement and supply of education materials to schools. The national education policy entitled *Educating Our Future* was also launched in

May 1996, this time focusing on decentralization, partnership, equity, efficiency, quality, democratization and effectiveness. Under *Educating Our Future*, Government aimed to have every child access nine years basic education by 2015. Through the Basic Education Sub-Sector Investment Programme (BESSIP), the Government used the sub-sector-wide approach to realise its objectives. The Ministry of Education Strategic Plan (MoESP) covering the period 2003 to 2007 was developed to operationalise the policy. As a complement to this and to enhance *access*, the Free Basic Education policy for Grades 1-7 was announced in February 2002, which subsequently abolished all user fees. Government directed that although Education Boards and Parents and Teachers Associations (PTAs) may raise funds, no child should be denied access to school on account of cost.

2.2 Goal and Strategic Focus

The Goals of the Education sector during NIF III shall remain similar to those stated in the Sixth National Development Plan (SNDP), namely, *Increase equitable access to quality education and skills training to enhance human capacity for sustainable national development*. In the context of this goal, the strategic focus of the Education sector, as specified in the SNDP,

“...will be on expanding access to high school and tertiary education. Further, efforts will be made to improve the quality of education at all levels so that appropriate skills, knowledge, attitudes and values required for social and economic development are imparted to the learners. Special attention will therefore be given to curriculum review, development and delivery. Particular attention will also be placed on teacher availability especially in the rural areas.”⁵

2.3 Broad Objectives

The following are the broad objectives of the Ministry during the NIF III period:⁶

- (a) To increase access, efficiency and equity to quality ECCDE and Primary Education;
- (b) To increase access, efficiency and equity to quality Secondary School education;
- (c) To increase the number of qualified and competent teachers in schools;
- (d) To increase access, participation and equity in the provision of quality university education;
- (e) To increase efficiency and equitable access to quality TEVET;
- (f) To increase Adult Literacy levels;
- (g) To expand and improve infrastructure; and
- (h) To review the curriculum at all levels to make it relevant and responsive to national aspirations and education needs.

In the light of the above, a number of strategic priorities shall guide the implementation of the NIF III. .

- (a) *Quantitative* aspects of educational service provision shall be addressed through increased enrolments.
- (b) *Quality* aspects shall be addressed by equipping schools with the requisite skills and facilities. Adequate school infrastructure, complemented by sufficient suitably qualified teachers, curriculum reforms and improved teacher supervision and support, shall be part of the Government’s quality improvement strategies. The enhancement of *learning achievement* will continue to be linked to the Government’s target of attaining relevance,

⁵ GRZ, Ministry of Finance and National Planning, Sixth National Development Plan, Lusaka, 2011.

⁶ These are the SNDP objectives.

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- effectiveness and efficiency which collectively promote the prospects for *quality* educational service provision. Particularly targeted shall be curriculum development; use of ICTs as a teaching and learning tool; improved educational materials production, procurement and distribution; expanded and improved teacher training, deployment and retention;
- (c) Equitable *access to education* shall be enhanced through formal and alternative modes of delivery in partnership with key stakeholders. This shall be supported by an effective *infrastructure development* programme that facilitates, in an equitable manner, the construction, rehabilitation and maintenance of the Education sector's physical assets. Infrastructure development, particularly the construction of classrooms, shall constitute an important priority towards the achievement of both qualitative and quantitative objectives of the Government as it strives to meet the MDGs by 2015;
- (d) *Systemic restructuring and management capacity enhancement* shall be an integral part of Government efforts towards efficient and effective education service delivery. This will take the form of systemic improvements at both the Headquarters and lower levels. In this regard, decentralisation will be one instrument that shall be depended upon to realise efficiency gains in educational management and service delivery during the Strategic Plan period. More decentralised systems of delivery shall call for improvements in school management that, in turn, entails the development and application of effective teacher assessment and inspection systems; enhancement of inspections of primary schools; design and application of an effective standards assurance system that monitors teacher performance; and securing qualitative and quantitative stability in the supply of well-motivated, satisfied and healthy teachers;

Improvement of the quality of teacher management shall entail the establishment of an effective oversight body on quality control and quantitative improvements in teacher supply, which will be complemented by an effective Performance Management System that would monitor the performance of teachers at different levels, both in schools and teacher training institutions. E-governance in teacher management would be explored so as to minimise the occurrence of vices such as teacher absenteeism and the associated reduction in pupil-teacher contact time, which adversely affects teaching and learning. Teacher motivation shall complement these efforts through, for example, clear career structure and a well-coordinated In-service training (INSET)/Continuing Professional Development (CPD) structure.

- (e) *Equity* considerations in the provision of Universal Education at all levels shall be the cornerstone of the Education sector approach, paying special attention to the peculiar needs and requirements of the girl-child, OVC, Learners with Special Education Needs (LSEN) and those that are affected by, and/or infected with, HIV and AIDS. An effective targeting mechanism to identify those to be supported shall be developed.
- (f) Nurturing strong *Partnerships* with other educational services providers is important especially in the light of the Government's Decentralisation Policy. In the spirit of real partnership and information sharing, the Government, through the Ministry, shall firstly, orient all government officials and other stakeholders (including NGOs, CBOs, FBOs, the private sector, etc.) to the contents and process of NIF III. Secondly, NIF III shall be disseminated to local and external stakeholders, defining its main components/targets, and enlisting support for those targets. The functional relationships of different

stakeholders shall be further redefined and the modalities of cooperation with non-state actors agreed upon through consultative processes. The magnitude of the challenges identified during NIF II means that the implementation of NIF III has to be a product of collective action and collaboration between the Government and all stakeholders.

The NIF III implementation, supervisory, and monitoring structure will, therefore, be developed in a manner that would provide guidance to non-state actors in terms of:

- (a) Strategic direction;
- (b) Activity coordination;
- (c) Implementation sequencing;
- (d) Monitoring of implementation; and
- (e) Periodic impact assessments.

These processes shall be undertaken within the existing consultative structures that include the Education Sector Advisory Group (Education SAG). For example, the role of community schools shall be redefined and transformed in a manner that shall secure their smooth integration into the Government's formal schooling system.

2.4 Main Policies

In order to address the imbalances and challenges, the new Government has committed itself to raising the educational standards and the science, technology and research agenda by, among other issues, implementing the following policy aspirations:

- (a) Re-introduce free and compulsory education for all from Grade 1 to Grade 12;
- (b) Upgrade all primary schools providing Grades 1 to 4 or those providing Grades 5 to 7 to full primary school status offering Grades 1 to 7;
- (c) Upgrade community schools to fully fledged primary and secondary schools;
- (d) Review the language of instruction policy so as to promote the teaching of local languages at primary level;
- (e) Phase out Basic and High School education system and re-introduce the conventional primary and secondary education system;
- (f) Provide and facilitate Early Childhood Education (ECE) centres and teachers;
- (g) Open two paths for Grade 8 pupils based on their Grade 7 performance to follow up to grade 12: one for learners who will follow an academic path and the other a technical path;
- (h) Re-orient the curriculum for primary and secondary schools to put emphasis on life skills subjects to enable learners cope with the demands of self-employment and the labour market;
- (i) Upgrade teachers' qualifications to meet the minimum required standards through in-service training (reintroduce the apprenticeship system);
- (j) Promote inclusive education by integrating children with mild to moderate learning disabilities in the mainstream schools and offer special education to those who cannot be integrated;
- (k) Give priority to the teaching of science subjects in educational institutions at all levels;
- (l) Promote collaboration between industry and research institutions;
- (m) Establish a national research centre to coordinate research activities;
- (n) Trades training institutes/centres rehabilitated and construct new ones in all provinces;

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- (o) Increase number of public universities by converting existing colleges of education;
 - (p) Provide a loan scheme for tertiary education for all pupils who qualify;
 - (q) Create independent regulatory body to register and enforce education standards at tertiary level;
 - (r) Create exclusively science and technical schools, colleges and universities; and
 - (s) Establish a national research centre to coordinate research activities;

The above policy aspirations build upon the successes of and lessons from, the NIF II and the TEVET and Science, Technology and Innovation Policies. To be in line with the new Government's aspirations, several instruments such as the Education Policy of 1996 and the Education Act of 2011 will have to be reviewed.

The budget detailed in chapter 16 has used a model that presents two scenarios: high case and base case. The former incorporates all of the above policy aspirations and shows an enormous funding gap. The latter uses realistic estimates for both funding requirements and expected revenue and expenditure over the period. The base case has also taken the policy aims into account and acknowledges that they may not be fully achievable over the period of NIF III. Therefore, it has used lower targets for the policy aspirations to enable the development of a solid base from which the policy objectives over the longer term will be reached.

Part Two
Sub-Sectors

3.1 Situational Analysis

The provision of Early Childhood Care and Development Education (ECCDE), which caters for children aged between 0 and 6 years, has not been the responsibility of the Ministry of Education. It has remained mainly in the hands of the private sector and civil society under the Ministry of Local Government and Housing. Notwithstanding this, the *Education Reforms* of 1977, *Focus on Learning* of 1992 and the 1996 *Educating Our Future* policy document did recognize the pivotal role of ECCDE as a foundation for all later learning.

The overall delivery of ECCDE services has remained largely underdeveloped and uncoordinated. In 2007, only 17.1% of children, mostly in urban areas, had access to ECCDE in Zambia. Even with this paltry percentage of the provision of early childhood education, the quality of the service is still low and the learning environment, curriculum and the instruction materials often inappropriate and inadequate. The low access to ECCDE services is explained by a host of factors, including lack of infrastructure; inadequate financing; inappropriate and uncoordinated curriculum; as well as limited awareness of the importance of early learning.

The age range that defines the critical period of early childhood is 0 to 6 years. This is a critical period for child survival, growth and development. It is the period when the brain develops rapidly; when walking, talking, self-esteem, vision of the world and moral foundation are developed. Government acknowledged in the *Fifth National Development Plan* (FNDP) that ECCDE is one of the most effective strategies in poverty reduction as it enhances the chances of breaking the inter-generational cycle of poverty.

Quality issues in ECCDE have been compromised by a number of factors that include the following:

- (a) *Human Resource*: Lack of appropriately trained human resources at all levels;
- (b) *Curriculum*: Lack of National ECCDE curriculum;
- (c) *Infrastructure*: Inadequate and inappropriate public infrastructure at all levels;
- (d) *Monitoring and Evaluation*: Lack of ECCDE monitoring and evaluation mechanisms;
- (e) *Development of Materials*: There are no systems that are dedicated to the development of ECCDE materials; and
- (f) *Community Involvement and Parental participation*: There is low community involvement and parental participation in ECCDE programmes.

There are also several challenges that hinder the Ministry from realising its goals and objectives in ECCDE in an efficient and effective way. They include the following:

- (a) Early Childhood Teacher training is limited only to 3 out of 14 colleges of education;
- (b) The Ministry does not provide ECCDE services which has implication on the recruitment of early childhood teachers from government colleges of education;

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- (c) ECCDE is not adequately mainstreamed into the Ministry programme structure;
 - (d) Insufficient resource allocation to the ECCDE sub-sector;
 - (e) Absence of monitoring and evaluation systems for ECCDE;
 - (f) Lack of a relevant, holistic and outcome-based ECCDE Curriculum; and
 - (g) Lack of national early learning standards.

With respect to equity considerations, child enrolment in ECCDE services in Zambia is, to a large extent, dependent on parents' economic conditions and exposure to information on the importance of ECCDE.

From the perspective of the Ministry, the ECCDE benefits include the following:

- (a) *Impact on school achievement:* Children that are exposed to an effective ECCDE are better equipped for the demands of the school system, including proven record of improved academic achievement. Thus, ECCDE programmes enhance children's readiness for schooling;
- (b) *Reduction of educational wastage:* ECCDE activities reduce the number of repeat cases and failure rates, thus, allowing the system to optimally apply its limited resources to more school children; and
- (c) ECCDE has strong gender implications as it enables women to work and participate in development activities while the children are being cared for. Moreover, to the extent that gender disparities and marginalization of girls start during early years, ECCDE programmes can reduce gender inequalities by providing a fair and equitable start to both girls and boys.

3.2 Main Policies, Objectives and Strategies

The ECCDE policy framework is linked to the country's overall national development. Under this policy, the responsibility to coordinate the provision of ECCDE lies with the Ministry. However, during the NIF III period, the Ministry will only be concerned with Early Childhood Education (ECE) which caters for children aged 3 to 6 years. The overarching principle is that the Ministry will build upon existing initiatives that address survival, health, nutrition, and education for the very young while at the same time advancing the rights of the child.

The following are the policy aspirations of ECE in Zambia during the NIF III implementation period:

- (a) Secure quantitative and qualitative improvements in ECE service delivery through the provision of a system of guidelines, standards and a mechanism to put the rights and needs of all children at the centre of national development;
- (b) Ensure that, as much as possible, children aged 3-6 years are allowed equitable access to ECE services. As stated in the SNDP, it is anticipated that 30 percent of children would, by 2015, enter primary education with quality ECE experience;
- (c) Provide a regulatory framework within which the delivery of ECE services shall be extended, focusing on the development and application of standards and quality control mechanisms. In this regard, minimum standards for the operation of ECE centres shall be developed;
- (d) Provide a legal structure where people from the grassroots to the national level can effectively participate in the planning, monitoring and evaluation of the ECE programme and associated activities;

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- (e) Ensure that research, piloting of activities and documentation of best practices in ECE are done and that, on the basis of the findings, the ECE programme is improved and high quality services maintained; and
 - (f) Mobilise, advocate for, and empower all stakeholders at different levels to enable them to fully support and participate in various ECE activities. In this regard, the Ministry shall ensure that ECE services management involve communities and are driven by them.

At this level, the following are the main objectives that shall guide NIF III:

- (a) To bring clarity to the policy objectives of the Government in the field of ECE;
- (b) To establish an appropriate institutional, regulatory and consultative structure for ECE;
- (c) To expand the provision of ECE services in the country;
- (d) To provide equitable access to ECE facilities;
- (e) To provide relevant ECE curriculum and learning materials;
- (f) To implement an effective Monitoring and Evaluation (M&E) system for ECE; and
- (g) To improve the human resource base of ECE.

The strategies shall be built on a comprehensive, multi-dimensional approach, including health, nutrition, education and psychosocial elements. Particular emphasis will be placed on the most deprived and underprivileged children, i.e. those living in difficult socio-economic conditions and are vulnerable. In this respect the strategies will be as follows:

- (a) Review current legislation and streamline it to suit ECE agenda, and provide more complete documentation about the situation of young children in the country;
- (b) Social mobilisation and advocacy with key stakeholders for effective participation in, and support of, ECE programme and inclusion of all children, especially those orphaned by HIV and AIDS;
- (c) Collaboration and networking among and between local and international stakeholders for effective and efficient resource utilisation under ECE programmes;
- (d) Involve communities in the creation, implementation and sustainability of ECE activities in order to forge partnership and linkages for ensuring high quality programmes;
- (e) Provide set standards, guidelines, and curriculum with relevant teaching and learning materials for ECE;
- (f) Increase enrolment in ECE centres;
- (g) Provide monitoring and evaluation mechanism framework;
- (h) Recruitment and deployment of ECE teachers and other staff;
- (i) Mainstreaming cross-cutting issues in ECE activities, including gender, environment, HIV and AIDS, and other equity concerns; and
- (j) Take lead role in regulating the establishment and registration of ECE facilities.

ECCDE is a sub-sector and the institutional framework that currently exists in the Ministry will be enhanced by creating appropriate ECE structures at all levels so as to provide the required services. Therefore, appointments of ECE focal points at National, Provincial and District levels shall be made. Furthermore, the provision of ECE will be guided by the following operational considerations:

- (a) Establish appropriate organisational structures at ECE centres; and
- (b) Establish a National ECE Consultative group of stakeholders working with children within the relevant age groups.

In recognition of the multi-faceted nature of the provision of ECE, the Ministry will endeavour to provide the much required co-ordination and synergies in the programmes that involve other sector Ministries. The Ministry will also work in close collaboration with other relevant stakeholders through their programmes as outlined in the 2008 National Policy Framework on ECCDE.

3.3 Planned Activities

Table 10 shows the indicative activities for ECE during the NIF III period:

Table 10: Planned Activities for Early Childhood Education during the 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core implementers
			Indicators	Baseline 2009	(2015 Targets)		
1. To bring clarity to the policy objectives of the Government in the field of ECE	Review current legislation and streamline it to suit ECE agenda, and provide more complete documentation about the situation of young children in the country	Review of ECE legislation	Completion of ECE Legislation	ECE legislature note available	ECE legislature in place	Harmonisation of ECE operations	MESVTEE
2. To establish an appropriate institutional, regulatory and consultative structure for ECE	Social mobilisation and advocacy with key stakeholders for effective participation in, and support of, ECE programme and inclusion of all children, especially those orphaned by HIV and AIDS	Conduct social mobilisation and advocacy with key stakeholders in ECE	No. of key stakeholders participating in and supporting ECE programmes	Data not available as not previously collected	50 % of ECE stakeholders participating in and supporting ECE programmes	Increased participation of stakeholders in ECE programmes	MESVTEE
		Establish an appropriate institutional and regulatory structure for ECE	Number of ECE institutional and regulatory structure	No ECE institutional and regulatory structure exist	ECE institutional and regulatory structure established	Coordinated and effective ECE operations	
	Collaboration and networking among and between local and international stakeholders for effective and efficient	Identify, collaborate and network with local and international stakeholders in ECE	ECE Network in place	No ECE network in place	At least one network is established and functional	Increased assistance and participation in ECE programmes	

Table 10: Planned Activities for Early Childhood Education during the 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core implementers
			Indicators	Baseline 2009	(2015 Targets)		
	resource utilisation under ECE programmes.	Conduct local and regional field visits to learn ECE best practices	Number of field visits	None	3 regional and 3 local visits undertaken	Improved provision of ECE services	
3. To expand the provision of ECE services in the country	Increase enrolment in ECE programmes	Enroll learners at established ECE Centres	% of children entering grade 1 with ECE experience	11.59% total M= 11.06% F= 12.10%	30% Total M= 30% F=30%	Improved capacity to learn effectively	MESVTEE
		Construct model ECE centres and convert some existing classrooms at primary schools	Number of classrooms at ECE Centres	None exist	3,000 classrooms		
	Involve communities in the creation, implementation and sustainability of ECE activities	Community sensitization and advocacy on ECE activities	No. of sensitisation meetings	None conducted by MESVTEE	at least two meetings per district per year are held	Community ownership of ECE activities	
4. To provide equitable access to ECE facilities	Mainstreaming cross-cutting issues in ECE activities, including gender, environment, HIV and AIDS, and other	Provide inclusive access to ECE by expanding opportunities in disadvantaged areas, particularly rural provinces areas	No. of ECE centres in disadvantaged areas	None exist	5 ECE centres constructed per district	Increased number of children from disadvantaged areas accessing ECE	

Table 10: Planned Activities for Early Childhood Education during the 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core implementers
			Indicators	Baseline 2009	(2015 Targets)		
	equity concerns	Provide training to teachers in special education	No. of ECE teachers trained in special education	Data is not currently available	At least 1 special education teacher trained in each ECE centre	Increased number of LSEN	
5. To provide relevant ECE curriculum and learning materials	Provide and set standards, guidelines, and curriculum with relevant teaching and learning materials for ECE	Develop and disseminate curriculum, guidelines and T/L materials for ECE	Curriculum, guidelines and T/L materials disseminated	No curriculum and guidelines exist for ECE	Curriculum, guidelines and T/L materials disseminated to all ECE centres	Improved standards of ECE provision	MESVTEE ECE Caregivers
6. To implement an effective Monitoring and Evaluation (M&E) system for ECE	Provide monitoring and evaluation system for ECE	Develop and disseminate ECE M & E system	M&E system incorporated into existing EMIS system	M&E system not in place for ECE	M&E system in place and operational	ECE data utilised in planning and budgeting	MESVTEE
		Train stakeholders on the use of the ECE M&E system	No. of stakeholders trained in M&E system	No stakeholder trained	5 officers per district	Evidence based decision making	
7. To improve the human resource base of ECE	Recruitment, deployment and retention of ECE teachers and other staff	Recruit, deploy and retain teachers and other staff to needy ECE centres	No. of ECE trained teachers and other staff recruited and deployed	M= 318 F=1,208 T=1,608	7,000 ECE teachers trained	More children having completed ECE entering PS	MESVTEE

4

Primary Education

4.1 Situational Analysis

Primary education provides an environment that promotes desirable attitudes, values and behavioural change among learners. In this respect, the Ministry has for the past decades put emphasis at this level of education to enable eligible children to access education and to ensure that those who enter the school system complete the full cycle of education. This is also on the premise that primary education lays firm ground upon which all other levels are built. Since 1996, Primary Education Sub-sector has been operating as Basic Education Sub-sector offering Grades 1-9 for children aged between 7 and 15 years. With the coming in of the new Government in 2011, the Basic Education Sub-sector has reverted to the Primary Education Sub-sector to offer Grades 1-7 to children aged between 7 and 13 years. In the new education structure, Grades 8 and 9 have been amalgamated with the High School Sub-sector to form the Secondary School Sub-sector. The reasons for these policy changes have been described in Chapter 2.

The government remains committed to achieving the MDG's and EFA goals. To this effect, it has a millennium class⁷ which, in collaboration with all key players, is being used as a model to monitor progression towards the achievement of these set goals.

There are four categories of education providers at primary school level. These are: Government, Private Sector, FBO and Communities. As at 2009, there were 896 schools offering Grades 1 to 4; 4,137 schools offering Grades 1 to 7; 2,871 offering Grades 1 to 9; and 5 schools offering Grades 8 to 9 only. This brought the total number of schools in 2009 to 8,437. Out of these, 5,026 were government, representing 59.56 percent, 2,661 (or 31.54 percent) were community, 384 were private and 347 were grant-aided.

With regard to access considerations, the official age for entry into first grade is 7 years. However, the system still has a backlog of over age children who are unable to enter into Grade 1 for various reasons. Nevertheless, admissions to Grade 1 increased from 286,557 in 2002 to about 472,238 in 2010.

During 2010, the last year of the FNDP implementation, there were 3,045,277 pupils enrolled in Grades 1 to 7, which was a significant increase from about 2,000,000 in 2005. Of the total enrolment, 1, 525, 668 were girls while 1, 519, 609 were boys. The increase was attributed, in part, to the free education policy that the Government put in place as well as the expansion of physical space through infrastructure development. Despite the exponential increase in enrolments, it was established that about 10 percent of children still did not attend school.⁸ For example, the out-of-school children, as reported by the 2011 UNICEF survey, stood at 435,430, showing that there still exists a challenge of access. The main reasons for low access include inadequate classroom space and absence of schools within walking distance. Cultural practices

⁷ This is a cohort of children who enrolled in grade 1 in 2008 and are expected to be in Grade 7 in 2015.

⁸ According to the 2006 Living Conditions Monitoring Survey, 73 percent of 7-10 yrs children attend school while 89 percent of the 11-13yrs children attend school.

that inhibited children, particularly the girl child, from going to school, also contributed to the backlog of children that have not been enrolled into Grade One. The problem was more severe in low cost areas and among small-scale agricultural and fishing communities.

In terms of quality, test and examination results reveal that the quality of education in Zambia has remained low. The large increase in enrolment levels has been greeted by higher pupil/teacher ratios and higher pupil/classroom ratios; a state of affairs that has tended to compromise quality. National assessments of pupil performance in numeracy and literacy, for example, have shown that average scores rose from 34 to 38 percent between 1999 and 2003 and thereafter remained stagnant. The average scores for grades 7 and 9 examinations revealed a similar trend.

According to the 2008 National Assessment Survey Report, the national mean performance was 35.3 percent in English, 39.4 percent in Mathematics, 40.2 percent in Life Skills and 39.4 percent in Zambian Languages. This finding revealed that there was stagnation in pupil performance as compared to the 2006 survey where the mean performances in English, Mathematics and Zambian Languages were 34.5 percent, 38.45 percent, and 37.79 percent, respectively. This poor performance is further corroborated by the SACMEQ III (2007) results published in 2011. The average score for English and Mathematics were 511.8 and 500, while Zambia's scores were 486.2 and 434.4 respectively.

National examinations are conducted in Grades 7, 9 and 12. For Grade 7, the cut-off points are determined by the number of available places in Grade 8. These results are not means tested; therefore, they cannot be used to establish trends of learning achievement over time. For Grades 9 to 12, data has been included in Tables 3 and 4 which shows a relatively stable but low trend, for boys and girls but more prominently for girls. A number of reasons can be attributed to this, among them low morale among teachers, inadequate teaching and learning materials, as well as unsatisfactory supervision at school level.

One noteworthy aspect that has a bearing on the quality of educational service delivery relates to teacher supply. Until 2004, the Ministry had been unable to recruit teachers as a result of the employment freeze that the Government implemented. Equally important, the supply of textbooks brought some challenges to the Ministry as the policy of liberalising and decentralising the procurement of textbooks was problematic. According to the 2006 National Assessment Survey report, the majority of the pupils (59.9% in English and 58.4% in Mathematics) shared a textbook between 3 and 4 pupils. This meant that the targeted book/pupil ratio of two pupils per textbook was not achieved. The overall system performance in terms of enhancing quality has also been compromised by the following realities:

- (a) Inadequate number of qualified and motivated teachers and head teachers especially in rural areas leading to increased PTRs;
- (b) Poorly motivated teachers and head teachers leading to high teacher and pupil absenteeism;
- (c) Inadequate leadership and management capacity at the school and district levels;
- (d) Mismatch between increased enrolments and quality considerations that include teacher supply, teaching and learning materials and classroom space; and
- (e) Funding at primary sub-sector level in decline.

As part of quality improvement, the Ministry decided, over the 1998-2002 period, to reform the Zambian Basic School Curriculum for Grades 1-7. However, a host of challenges compromised the realisation of the intended results. These included the slow pace of curriculum reform itself;

weak supply of textbooks; mismatch between the curriculum in the Basic Colleges of Education and what was reformed at the school level; inadequately qualified and motivated teachers that were needed to apply the new curricula; ineffective management capacity at the school and district levels; and poorly motivated teachers and head teachers

Several other quality-related indicators contributed towards the poor pupil performance during the FNDP implementation period. They included high teacher attrition; high pupil/teacher ratio and pupil/book ratio as well as high pupil/classroom ratio. In 2010 alone, over 3,000 teachers were reported to have left the system due to various reasons. In some schools, the pupil/teacher ratio was as high as 65:1, which was far more than the Ministry's desirable level of 45:1. For the Ministry to have achieved the desirable pupil/teacher ratio, over 20,000 additional teachers were required in 2010.

Inadequate supply of teachers, particularly in rural areas, has resulted in some schools resorting to the multi-grade teaching and learning approaches for which teachers have not received specialised training. It also led to double shifting thereby reducing the pupil-teacher contact time to as low as three and half hours per day instead of the recommended five hours. This has resulted in limited focus on the learner. As for community schools, teacher qualifications are quite low, with over 80 percent of the teaching staff being under-qualified, thus, compromising the quality of educational service delivery.

Community schools have significantly assisted especially the OVCs and children from poor households, to access education. In 2010, the 2,851 community schools had 546,899 learners, representing about 18 percent of the total primary school enrolment. Between 2008 and 2009, the Ministry improved infrastructure at 236 community schools and converted them into government schools. The Ministry has also seconded government teachers to community schools and provided teaching and learning materials. Notwithstanding these efforts, community schools continue to face several challenges that include inadequate teaching skills; insufficient teaching and learning materials/equipment; sub-standard infrastructure; and inadequate qualified human resource.

With respect to efficiency, it has been observed that internal efficiency remained a major concern in the Basic Education Sub-sector during FNDP implementation. The sub-sector continued to experience high repetition and dropout rates. The repetition rates were as high as 14 percent in examination classes at Grades 7 and 9, implying that additional resources were required not only to cater for the regular cohort but also for those who repeated and stayed longer in primary schools. There has been a reduction in dropout rates over the years although it still remains significant at an average of 2.5 percent at primary education level with the girl dropout rates exceeding 5 percent in the last three years of primary education. This is attributed largely to early marriages and pregnancies.

System inefficiencies also exist in the deployment and utilisation of resources such as teachers. There is a mismatch between the supply and projected demand for teachers. There are particular problems in the supply of mathematics and science teachers although the two subjects are compulsory at upper primary level, as well as teachers trained in phonics for effective early grade reading acquisition. Uneven distribution of teachers also exists, with critical shortages occurring more in rural than urban areas. The teacher deployment system that has been put in place has given teachers the opportunity to choose districts in which they wish to work. Some districts do not receive sufficient applicants and often have to recruit teachers that apply to other districts. Many teachers refuse to take up rural posts. This is in spite of the 20 percent incentive payment

(rural hardship allowance) for teachers teaching in rural areas. Rural areas currently have much fewer teachers than urban areas.

4.2 Main Policies, Objectives and Strategies

The main policies of the Ministry, under the primary sub-sector, described below, will be initiated in the NIF III period but are unlikely to be fully implemented within the course of NIF III as they include some longer term goals. The intention is to secure quantitative and qualitative improvements in service delivery at this level through the following policy aspirations.

- (a) Securing quantitative and qualitative improvements in Primary Education service delivery through improvements in *access, quality, equity, and efficiency* of the education system;
- (b) Making Primary Education (Grades 1-7) not only free but also compulsory ;
- (c) Developing a comprehensive, diversified and integrated curriculum, which secures the human, practical and vocational relevance of Primary Education and complemented by an integrated national assessment framework that will equip Zambian children with necessary literacy, numeracy and survival skills;
- (d) Upgrading all Primary Schools to Full Primary Schools (to offer Grade 1 to Grade 7);
- (e) Upgrading community schools to fully fledged Primary Schools;
- (f) Reviewing the language of instruction policy so as to promote the teaching of local languages at primary level;
- (g) Re-orienting the curriculum for Primary Schools to put emphasis on life skills subjects to enable learners cope with the demands of self-employment and the labour market; and
- (h) Improving learning outcomes.

Given the policy aspirations stated above, the Government will in a phased approach provide adequate budgetary allocation to the sector to make free and compulsory education a reality and to better cater for the expansion and up-grading of infrastructure and teaching resources. To this effect, the objectives during the NIF III period will be as follows:

- (a) To provide access to Primary Education to all children of school-going age by 2015;
- (b) To improve the quality of education;
- (c) To improve the efficiency of the education system; and
- (d) To improve equity in education provision.

The following strategies will be used at this level:

- (a) Increase enrolment;
- (b) Recruit and deploy qualified teachers, particularly for rural areas;
- (c) Undertake a comprehensive review of the primary education curriculum;
- (d) Increase availability of teaching and learning materials including for OVCs and LSEN;
- (e) Integrate the use of ICTs in the education system including for LSEN with private sector partnership;
- (f) Integrate the use of ICTs in administration and management of the education system;
- (g) Enhance partnership among education service providers and other relevant stakeholders;
- (h) Improve school Leadership and Management;
- (i) Enhance provision of education services to OVCs and (LSEN);
- (j) Increase educational access by vulnerable children through the provision of targeted bursary scheme;
- (k) Strengthen data management and dissemination; and
- (l) Strengthen teacher training for early grade literacy and numeracy.

4.3 Planned Activities

Table 11 shows the indicative activities for Primary School Education during the 2011-2015 period:

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
1. To provide access to primary education to all children of school going age by 2015	Construct classrooms using community and contractor mode	Engage community and contractors to build classrooms	No. of classrooms constructed	2000	10,000	better completion rates for boys and girls	MESVTEE Civil Society Communities
		Classrooms built according to ministry guidelines	Classroom/Pupil Ratio ⁹	37.8	40		
	Sensitize community to enrol children into school	Enroll children into school	Net Enrolment Ratio	93.01% total M=95.09% F= 90.92%	98% total M=98% F=98%		
			# of districts whose NER difference by gender is more than the threshold of 5% for grades 1-7	18 districts	5 districts		
	Lobby for increased enrolments in schools run by other stakeholders	Hold consultative meetings with stakeholders to increase their school enrolments	% Enrolment in schools run by other Stakeholders	T= 24% m/f breakdown not available	T= 35% m/f tbd		
	Introduce alternative modes of education provision	Run alternative modes of education	% Enrolment of learners accessing education through different modes	No data available	400,000		

⁹ CPR is low because of double shifts

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
2. To improve the quality of education	Recruit and deploy qualified teachers in schools	Recruit and deploy teachers	No. of teachers recruited, and deployed	4, 000 total ¹⁰	16, 000	Improved pupil and teacher attendance improved pupil/teacher contact time	MESVTEE Civil Society Communities Teachers FBOs
			Pupil/teacher ratio (PTR) Grades 1-4 Grades 5-7	57:1 (gr. 1-4) 52:1 (gr. 5-7)	40:1 (gr. 1-4) 40:1 (gr. 5-7)		
			Number of districts with a PTR of over 100:1 in lower primary grades (1-4)	20 districts	7 districts		
	Undertake review of the primary education curriculum	Review of Primary Education Curriculum	Curriculum developed	Curriculum of 2003 in existence	Reviewed Curriculum disseminated to all teachers	Curriculum responsive to societal and national needs	
	Increase the availability of teaching and learning materials	Procure and distribute T/L materials	Textbook/Pupil ratio (TPR)	Eng = 0.45 Maths=0.39 Zam. lang. =0.27 Total-1.32	Eng = 1 Maths= 1 Zam. lang. = 1 Total = 1	Improved pupil performance	

¹⁰ Recruitment of teachers is not based on gender; it is the training that is based on gender

Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Improve early acquisition of essential skills in literacy and numeracy	Improve teaching in phonics and literacy	Literacy rate Grade 5	M=35.9 F=35.1 Total= 35.3% (2008)	M=65% F=65% Total= 58% (2008)	Improved management systems and capacity at school level	
		Improve teaching in mathematics	Numeracy rate Grade 5	M=39.8 F=37.2 Total 39.4% (2008)	M=65% F=65% Total=65%		
	Integrate the use of ICTs in the education system with private sector partnership	Deploy ICT infrastructure in primary schools	Percentage of schools using ICT for teaching and learning	Less than 2%	30% of primary schools using ICT for teaching and learning		
	Effective teaching and learning	Implementation of the provincial learner improvement strategy	No. of provinces implementing the provincial learner improvement strategy	5 provinces	10 provinces		
3. To improve the efficiency of the education system	Enhance partnership among education service providers and other relevant stakeholders at school/community level	Engage stakeholders in educational activities at school/community level	Number of Educational activities at school/community level	Stakeholders engaged in only very few educational activities like PTA,	Stakeholder engagement in all educational activities	Improved community participation Improved	MESVTEE Stakeholders

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Integrate the use of ICTs in administration and management of the education system	Deploy ICT infrastructure in primary schools	Percentage of schools using ICT for administration and management	Less than 20%	40% of primary schools using ICT for administration and management	management systems and capacity at district and school levels	
	Improve school Leadership and Management	Implement the leadership and management training programme (LMT)	No. of school managers/ head teachers trained	Number not known	50% of all head teachers and deputy heads in primary schools		
	Improve allocation of capitation grants to schools	Capitation grants	% of capitation grant fully paid	25 B ZMK	360 B ZMK	Better managed education at school level	MESVTEE
	Improve pass rates at grade 7 for boys and girls	EMIS Monitoring of teacher and pupil absenteeism through census tool revision	Completion rate	M=98.51 F=87.58 Total=93.04	M=99% F=99% Total=99%	Reduced repetition rates and costs per passer	MESVTEE
			Pass Rate Grade 7	Not currently used as terminal assessment			

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
			Number of districts whose transition rate from Grade 7 to Grade 8 for girls fall below the threshold of 50%	18 districts	Reduced by 50% of baseline		
	Enhance usage of T&L materials for primary schools	Provide T&L materials for primary schools	% of schools with improved PBR in English, Math, Science	No data currently available	At least 2:1 PBR for English, Math and Science	Improved teaching and learning	MESVTEE
	Expand, strengthen and decentralize supervision and support services;	Strengthen school supervision and support services	Repetition rates	M=6.63% F=6.17% Total=6.41%	M=2% F=2% Total= 4%		
			Drop-out rate	M=2.21% F=5.38 Total=3.68	M=1% F=1% Total=1%		
			Survival rate to Grade 7	M=70.25% F=60.39% Total=65.29%	M=99% F=99% Total=99%		

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
4. To improve equity in education provision	Increase the availability of teaching and learning materials for LSEN	Procure teaching and learning materials for the LSEN	% of schools with PBR for SEN specific Teaching and Learning materials for English, Math, Science	Data not currently available	1:1 PBR for English, math, Science textbooks	Inclusive participation of the LSEN and OVCs in the education system	MESVTEE
	Equitable education provision for boys and girls	Provide equal access for boys and girls (OVCs and LSEN)	Gender Parity Index (GPI)	0.99	1.2		
		Provide equal access across all districts	# of districts whose NER difference by gender is more than 5%	18	10		
			# of districts falling below the threshold of 80% NER for grades 1-7	3%	0%		
		Integrate the use of ICTs in education system for LSEN	Procure ICT equipment for the LSEN	% of LSEN schools equipped with ICT equipment	No data currently available		

Table 11: Planned Activities for Primary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Enhance provision of education services to LSEN	Strengthen special education services for the LSEN	% of LSEN that receive financial support	No data currently available	50% of LSEN		
			% of new primary schools with services for LSEN	No data currently available	100%		
	Increase retention of teachers in rural areas	Implement the teacher retention scheme	Pupil/teacher contact hours	6.5	7.0	Improved teacher and pupil attendance	

5.1 Situational Analysis

The new Government reverted the High School Education system to the Secondary School Education system to cater for children aged between 14 and 18 years, learning at Grades 8 to 12 based on the reasons stated in the Strategic Focus chapter. This transformation will enable the Grades 8 and 9 learners to benefit from both specialised teachers and rooms at secondary school level.

The government recognised the role of Basic Education as a tool for poverty reduction and national development. In the past decades, the country invested heavily in the expansion of the Basic Education Sub-Sector at the expense of the High School Education Sub-Sector. This resulted in limited infrastructure expansion at the High School Education level with very low transition rates. Despite the remarkable increase in pupil enrolment of about 16 percent from 2005 to 2010, transition from primary school (Grade 7) to junior secondary school (Grade 8) has remained almost static at 58 percent during the same period. This implies that Grade 8 places are still not adequate to meet the existing demand. The limited investment in High School infrastructure, equipment, maintenance, teaching and learning materials, and in the supply of qualified personnel had continued to check the effectiveness and efficiency of service delivery at this level. The limited number of High Schools and inhibiting distances to schools continued to pose a greater challenge for pupils. High school fees also limited school access particularly for children from poorer families.

In terms of quality considerations, High School graduates are generally not able to meaningfully fit into the world of work and industry mainly because school curriculum at this level is highly theoretical and compartmentalised, with little emphasis on practical skills. The Government will review the secondary school curriculum to put it in tandem with the expectations of the Zambian people. The aim is to transform Secondary School Education into an anchor of the whole youth strategy incorporating life skills, vocation and technical education. Currently, there is evident disjointedness between curricula at High School, skills training, Basic Education and higher learning institutions. There has also been inadequate provision of basic teaching and learning materials.

While gender parity at Grades 1-4 has been achieved, there are more girls than boys dropping out at higher grades. In 2009, the Gender Parity Index (GPI) for Grades 10-12 was as low as 0.833. The continued high number of girls dropping-out at higher grades is partly explained by the nearly 14,900 pregnancies that were recorded in 2009 at all levels (and 1,378 in Grades 10 – 12).

To address the quantitative hurdle in educational service provision, the Ministry successfully constructed 50 High Schools in the period of the FNDP. The construction of 47 High Schools was in progress by end of 2010 and expected to be completed by 2012. Once completed, these schools will be converted into secondary schools to create additional space for 21,000 pupils for Grades 8 to 12. Other efforts made by the Ministry include the community-based mode of construction for secondary schools.

5.2 Main Policies, Objectives and Strategies

Some of the main policies of the Ministry described below under the Secondary School Sub-sector will be initiated in the NIF III period but are unlikely to be fully implemented within the course of NIF III as they

are longer term goals. The intention is to secure quantitative and qualitative improvements in service delivery at this level through the following policy aspirations.

- (a) Re-introduce free and compulsory secondary education to Grade 12;
- (b) Upgrade community schools offering secondary education to fully fledged secondary schools;
- (c) Phase out Upper Basic Education (Grades 8-9) from Basic schools and re-introduce the conventional Secondary Education system offering Grades 8 to 12;
- (d) Implement the curriculum reform for the two-tier secondary education; one will be for learners who will follow an academic path and the other for learners who will follow a technical path;
- (e) Re-orient the curriculum for secondary schools to put emphasis on life skills subjects to enable learners cope with the demands of self-employment and the labour market;
- (f) Upgrade non-degree or diploma holder teachers through in-service training (re-introduce the apprenticeship system);
- (g) Give priority to the teaching of science, mathematics and technology subjects; and
- (h) Improve learning outcomes.

The overall objective of the Ministry under the Secondary School Sub-sector during the NIF III period is to secure quantitative and qualitative improvements in Secondary School Education service delivery. In this context, the Government's overall objectives shall focus on the following:

- (a) To improve access;
- (b) To improve the quality and relevance of the education system;
- (c) To improve efficiency and effectiveness of the education system;
- (d) To make the education system more relevant to the needs and aspirations of the nation; and
- (e) To improve equity.

To achieve the overall policy aspirations and objectives, the Ministry will employ the following strategies:

- (a) Increase access at Secondary School level;
- (b) Review the curriculum to develop two streams, academic and technical with emphasis on science, mathematics, technologies and life skills;
- (c) Recruit, deploy and retain appropriately qualified teachers;
- (d) Increase the availability of teaching and learning materials;
- (e) Expand, strengthen and decentralize supervision and support services;
- (f) Build management and competency capacity of school managers and standards officers;
- (g) Increase gender parity;
- (h) Strengthen the provision of school guidance and counselling services; and
- (i) Expand bursary support to OVCs and other disadvantaged children;
- (j) Provide learner friendly school environment;
- (k) Introduce targeted incentives for teachers, particularly in Special Education, Science, Mathematics and Technology;
- (l) Strengthen implementation of cross cutting issues; and
- (m) Strengthen data management and dissemination.

5.3 Planned Activities

Table 12 shows the indicative activities within the Secondary School sub-sector during the 2011-2015 period:

Table 12: Planned Activities for Secondary School Education during the 2011-2015 Period

Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
1. To Improve access	Increase access at secondary school level;	Construct new secondary schools (including junior secondary schools)	Transition rate	Gr 7-8 M=55.5% F=56.6% T=56.0%	Gr 7-8 M=90% F=90% T=90%	Increased numbers of boys and girls completing a full cycle of secondary education	MESVTEE
				Gr 9-10 M=41.4 F=40.7 T=41.0	Gr 9-10 M=65% F=65% T=65%		
				NER Grade 8-9	30.06% total M=30.19% F=29.93%		
			NER Grades 10-12	M=30.5% F=23.7% T=27.0%	M=45% F=45% T=45% total		
		Classrooms built according to ministry guidelines	Pupil/classroom ratio	Gr 8-9= 43.3 Gr 10-12= 43.9	Gr 8-9= 35 Gr 10-12= 35		
		Expand and improve facilities in existing schools	No of classroom	39,492 (for all grades) 8,194 (Gr 10-12)	Construct 168 classrooms		MESVTEE
Construct schools with special needs facilities;	No. of additional school places created for the LSEN	7%	10%	MESVTEE			
2 To improve the quality and relevance of the	Review and reform the secondary school curriculum to develop 2 tiers: academic and	Develop curriculum for secondary	Curriculum developed and disseminated to all teachers	2003 Curriculum	New Curriculum being	Improved pass rates for boys and girls	MESVTEE Civil Society Private Sector

Table 12: Planned Activities for Secondary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
education system	technical				implemented	Improved teacher and pupil attendance	
		Implement two tier secondary level education	Proportion of enrolment at junior secondary level by tier	0	60% academic 40% technical	Improved pupil/teacher contact time	
			Proportion of enrolment at senior secondary level by tier	0	60% academic 40% technical		
	Recruit, deploy and retain appropriately qualified teachers;	Recruitment and deployment of teachers to rural areas	No of teachers recruited and deployed	1000 total	7000 total		MESVTE
			Number of teachers having qualifications for secondary level	Gr 10-12 M=1,848 F=827 T=2,675	Gr 10-12 T=5,700		
			PTR Junior sec (8-9)	28:2	35:1		
			PTR Senior sec (10-12)	24.9	25:1		
	Increase the availability of T/L materials;	Procure and distribute T/L materials	% of schools with adequate laboratory	0	5%		MESVTEE

Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
			equipment for science				
			% of teachers with teacher's guides for science and math subjects	No data currently available	50%		
			PBRo for science and math subjects	No data currently available	2:1		
3. To improve efficiency and effectiveness of the Education system	Expand, strengthen and decentralise supervision and support services;	Strengthen school supervision and support services	pupil attendance rate	No data currently available annually in census	90% M=90% F=90%	Better governance and management of the education system	MESVTEE
			Repetition rates	M=9.33 F=9.36 T=9.35	M=4% F=4% T=4%		
			Drop-out rate	M= 1.78% F= 4.39% T= 2.99%	M=1.0% F=2.5% T= 1.75% %		
			Survival rate Grade 1- Grade 9	M= 38.99% F= 32.95% T= 35.95%	M= 50% F= 48% T= 49%		
			Improve pass rates at grade 9 boys and girls	EMIS Monitoring of teacher and pupil	Completion rate		

Table 12: Planned Activities for Secondary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
		absenteeism through census tool revision	Grade 9	T= 52.58%	T= 67%		
			Pass rate Grade 9 (2008 Exams)	M= 53.39% F= 43.10% T= 48.57%	M= 65% F= 63% T= 64%		
			Transition rate From Grade 9 to Grade 10	M= 41.83% F= 42.11% T= 41.96%	M=65% F= 67% T=66%		MESVTEE Civil Society Private Sector
	Improve pass rates at grade 12 for boys and girls		Completion rate Grade 12	M= 22.35% F= 17.32% T= 19.82%	51% total M=53% F= 49% T= 51%		
			Pass rate Grade 12 (2008 Exams)	M= 63.43% F= 57.97% T= 61.08%	M= 70% F= 70% T= 70%		
4. To improve equity at secondary School Level	Provide LSEN school environment	Construction of LSEN friendly schools	No of LSEN schools	60 available	Three in each province		MESVTEE
	Increase gender parity;	Sensitize communities on importance of girls' education	GPI for Grades 8-9	0.88	0.93		
			GPI for Grades 10-12	0.87	0.93		
			# of girls receiving bursaries in grades 8-9	9,540 per year (GRZ)	15,000 per year (GRZ)		

Table 12: Planned Activities for Secondary School Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Strengthen the provision of school guidance and counselling services.	Train teachers in guidance and counseling (G&C)	Percentage of schools with trained G&C teachers	No data	40% of all secondary schools		
	Introduce targeted incentives for teachers, particularly in SEN, Science, mathematics and technology	Scale up incentive schemes targeting SMT teachers	No. of SMT teachers benefiting from incentive schemes	None	M= 900 F= 600 T=1,500		
	Increase retention of teachers in rural areas	Implement the teacher retention scheme	Pupil/teacher contact hours(Gr 8-12)	7.18 hours (average)	7.9 hours (average)		
	Strengthen implementation of cross cutting issues	Mainstream cross cutting issues into the education system	No. of schools with active clubs in cross cutting issues	56% of secondary schools	All secondary schools		

Technical Education, Vocational and Entrepreneurship Training (TEVET)

6.1 Situation Analysis

UNESCO and the International Labour Organisation (ILO) define Technical and Vocational Education and Training (TEVET) as a term referring to “those aspects of the education process involving, in addition to general education, the study of technologies and related sciences, and acquisition of practical skills, attitudes, understanding and knowledge relative to various sectors of economic and social life.”¹¹ Globally, strides have been made to ensure that TEVET takes centre stage as a tool for socio-economic development. As a result, access to TEVET has become paramount with emphasis on making it inclusive. TEVET should be seen to provide access to wide and empowering range of knowledge, skills and values to its learners. To enable this, the teaching and learning methods should recognise and accommodate the different starting points, learning rates and previous experiences of the learners.

In the Zambian context, TEVET is conducted formally or non-formally and plays a critical role in socio-economic development. It provides opportunities for economic and income growth, poverty reduction, employment, productivity and human development. The sub-sector also provides a transition for learners from the school system to the world of work. It comprises all service providers under ownership groupings consisting of public, private, community, Trusts and NGOs. This also includes Schools for Continuing Education providing Skills Training in the in the former Ministry of Education.

In line with the new Government aspirations, the Ministry was merged to include TEVET and intends to implement a two-tier education system which will introduce vocational training at an early stage. Learners shall be given an opportunity to undertake Technical Education training from Grade 8 with emphasis on life skills subjects. This will require reviewing the curriculum for both primary and secondary schools as it is acknowledged that the fundamental skills of reading and mathematics are the building blocks for all further education levels. In addition, as those students proceed through the academic stream into tertiary education, they will also require different skills to prepare themselves for self-employment and the changing labour market demands. Learners whose strength will be in non-practical subjects will also be encouraged to continue with the academic path. This is being done in line with the Constraints Analysis of the TEVET and Education system in Zambia conducted by the Millennium Challenge Corporation which suggests three problems:

- (a) Employability of the labour force is limited by skills at many levels due to the challenges faced by the whole education system;
- (b) Labour productivity, and hence competitiveness and the cost of doing business, depends in part on labour skills; and

¹¹ UNESCO, Technical and Vocational Education and Training for the Twenty First Century: UNESCO and ILO Recommendations (2002) United Nations, Education and Scientific Organization and International Labour Organization

-
- (c) Self-employment (mainly in the informal sector) depends on skill levels and is crucial for poverty reduction.

The aspect of access remains cardinal in the TEVET sector. Currently, access to TEVET is very low with capacity and vulnerability acting as major barriers. About 300,000 youths leave the school system every year at both Grades 9 and 12. The TEVET system can only enrol or absorb about 14,000 students annually, (i.e., about 4.6 percent rate of absorption). With a total youth population estimated at 2,910,297 for the year 2010, total annual enrolment for TEVET and universities was below 50,000, giving a tertiary education Youth Gross Enrolment Ratio of about 2 percent. This was far below the 2007 respective average figures of 6 percent for Sub-Saharan Africa and the 26 percent world average as reported by UNESCO.¹² Zambia's ratio was in the bottom cluster of Sub-Saharan countries. The challenge for TEVET is how best to provide opportunities and diversity of training pathways in order to accommodate the increasing number of school-leavers, as well as existing out-of-school youth.

Another important aspect of TEVET relates to demand responsiveness. The 2004-2006 Tracer Study conducted by the Ministry of Science, Technology and Vocational Training (MSTVT)¹³ found that 55% of TEVET graduates find employment within six months of graduation, while 34.8% of the graduates find employment between six to twelve months after graduation, suggesting that TEVET institutions are increasingly offering programmes that are responsive to the market demand. In response to labour market demand, elaborate systems for curricula review involving relevant sectors of industry and other stakeholders have been implemented.

The TEVET Sub-sector still faces some progression challenges in certain programmes as there are no institutions that offer higher level qualification. The absence of institutions offering higher level qualifications tends to hinder interested candidates to upgrade themselves in their skill areas. To address this challenge, the Ministry has embarked on a programme to merge the three Luanshya-based institutions into a Polytechnic that would offer higher level qualifications.

As in other sectors, equity considerations are equally important in TEVET. The number of socially disadvantaged learners almost doubled from 8.5 percent in 2003 to an estimated 18 percent in 2008. An increase by 25 percent of female graduates from TEVET Programmes across the board was achieved from 2002 to 2008. As at 2010, enrolment by programme by gender indicated that, in 2009, as many as 19,850 males were enrolled in various programmes, against 13,549 females, revealing equity challenges. Lower level enrolment amongst female students is particularly prevalent in engineering and technical programmes.

The Ministry also aims to promote the participation of vulnerable persons in TEVET. The sector still faces challenges in the area of unfriendly physical infrastructure for persons with disabilities; inadequate number of trained lecturers in special skills for training persons with disabilities; and inadequate financial support for gifted learners who may not be able to pay fees. Table 13 gives a summary of enrolments by programme and gender between 2008 and 2010.

¹² UNESCO Institute for Statistics, Trends in Tertiary Education: Sub-Saharan Africa –Fact Sheet July 2009 No. 01.

¹³ Ministry of Science, Technology and Vocational Training, A Tracer Study of the Graduates for the Years 2004,2005 and 2006, Lusaka, p.33

Table 13: Student Enrolment by Programme by Gender (2008-2010)

PROGRAMME	2008		2009		2010	
	Male	Female	Male	Female	Male	Female
Business studies	6,300	5,918	6,930	6,509	7,338	6,990
Secretarial	3	1,428	0	1,499	0	1,574
Hotel and Tourism	1,120	2,542	1,176	2,669	1,234	2,194
Media & Applied Arts	1,010	1,990	1,061	2,089	1,113	2,194
Paramedical	160	180	168	189	176	199
Aviation	95	7	110	10	135	12
Craft programmes	6,702	900	6,903	950	7,148	992
Advanced certificate/Technician programmes	4,000	567	354	55	414	80
Diploma/Technologist programmes	460	17	483	18	490	20
Total	19,850	13,549	17,185	13,988	18,048	14,683
Percentage	59	41	55	45	55	45
Total	30,521		31,173		32,911	

Curriculum and Human Resource Development constitute a particularly important pillar in TEVET. In recognition of this fact, the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) is mandated by law to review and develop national curricula for TEVET. In collaboration with industry, TEVETA has been doing this. However, financial constraints have slowed down this process. In addition, the effective implementation of the current curriculum has been constrained by lack of investments in technology, equipment and training materials. Furthermore, sustainable development has not been addressed as environmental issues have not been taken into consideration during the development of local and national curricula. There is also a system-wide lack of appreciation of the relationship between skills training and sustainable development.

There is, therefore, need to mainstream issues of Education for Sustainable Development in the TEVET system to ensure that issues of the environment, social protection and economic development are addressed. The sector has also been negatively affected by the high staff turnover mainly on account of the failure of the system to supply and retain qualified and experienced staff because of uncompetitive conditions of service and, in some cases, due to inadequate opportunities for staff development.

The merging of the TEVET into one Ministry is a way of addressing these constraints. With the two tiers proposed in the new curriculum at secondary level, there is renewed optimism that TEVET will be responsive to labour markets and produce graduates that have the requisite skills to ensure economic growth and prosperity.

6.2 Main Policies, Objectives and Strategies

Government Policy on TEVET, passed in 1996, aimed to create conditions for the development of entrepreneurial culture and its related skills in response to the country's developmental challenges. The TEVET sub-sector, thus, aims to enhance the ability of the labour force to start and run viable growth-oriented business enterprises as a deliberate career alternative. Skills development shall remain the priority policy of Government under TEVET in the light of the current challenges within the labour market in Zambia, which include growing labour force that is not matched with the formal economy's absorptive capacity.

The policy focus during NIF III will be the following:

-
- (a) Improve and expand facilities for teaching science and technical subjects;
 - (b) Create exclusively science and technical schools, colleges and universities;
 - (c) Enhance capacity by expanding training programmes for scientists;
 - (d) Promote collaboration between industry and TEVET institutions;
 - (e) Strengthen the Assessment and Certification systems in TEVET; and
 - (f) Improve learning outcomes in TEVET institutions.

The strengthening of the Assessment and Certification systems in TEVET is considered key. As access increases through the implementation of different modes of training delivery, more candidates will demand assessment services that meet the current and future demand of the labour market. The Government will also focus on the provision of alternative training opportunities in both the formal and informal sectors. There is, therefore, need to mainstream issues of Sustainable Development in the TEVET system to ensure that issues of the environment, social protection and economic development are addressed. Thus, the following will be the main objectives:

- (a) To enhance access to training;
- (b) To improve quality of training;
- (c) To provide an efficient and appropriate TEVET training that is responsive to the labour market; and
- (d) To promote equity in the provision of training.

The following strategies will be used to achieve the objectives of TEVET during the NIF III period:

- (a) Expand availability of training places;
- (b) Provide and promote alternative modes of training delivery;
- (c) Develop appropriate training, assessment and qualification systems in TEVET;
- (d) Improve examination and assessment systems;
- (e) Provide adequate qualified staff;
- (f) Equip TEVET institutions with appropriate equipment, teaching and learning materials;
- (g) Integrate the teaching of entrepreneurship into TEVET;
- (h) Facilitate collaboration between Research and Development and TEVET institutions;
- (i) Strengthen the planning, coordination and monitoring of TEVET programmes in order to ensure effective and efficient implementation;
- (j) Promote participation of females and LSEN in technical programmes; and
- (k) Increase financial support to the marginalised groups.

6.3 Planned Activities

Table 14 shows the indicative activities under TEVET during the 2011-2015 period:

Table 14: Planned Activities for TEVET during the 2011-2015 Period									
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers		
			Indicators	Baseline (2009)	Target (2015)				
1. To enhance access to training	Expand availability of training places	Construct, rehabilitate and maintain infrastructure	% of school leavers completing grade 12 accessing training	12% total Data on m/f not currently available	40% total M=50% F=50%	Improved attendance rates Improved learning environment	MESVTEE, CSO, Private sector		
			Number of training institutions rehabilitated and/or maintained	10	30			Improved access to TEVET	MESVTEE, CSO, Private sector
	Provide and Promote alternative modes of training delivery	Provide ODL training programmes	Number of students enrolled on ODL programmes	3,000 total Data on m/f not currently available	10,000 total M=5,000 F= 5,000		MESVTEE, CSO, Private sector		
			Number of institutions offering ODL programmes	15	25			MESVTEE, CSO, Private sector	
			Promote TEVET Learnership Scheme	Number of students enrolled on the Learnership programmes	69 total Data on m/f not currently available				300 total M=150 F=150
2. To improve quality of training	Develop appropriate training, assessment and qualification systems in TEVET	Implement TEVET qualifications Framework	Number of qualifications developed and accredited on the TQF	60	165	Improved entrepreneurship	TEVETA / MESVTEE,, CSO, Private sector		

Table 14: Planned Activities for TEVET during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
		Enhance mechanisms for accreditation of training providers	Accreditation instrument for training providers	Inadequate accreditation instrument	Revised accreditation instrument		TEVETA MESVTEE
		Review and / or develop National curricula	Curricula	Existing curricula	Revised curricula		TEVETA/ appropriate stakeholders
	Improve examination and Assessment systems	Procure ICT infrastructure for examination and assessment systems	ICT infrastructure	Basic equipment	ICT infrastructure deployed and in use		MESVTEE,, CP, CSOs
	Improve teaching and learning	Provide refresher teacher training in TEVET	Number of teachers trained	Data not currently available	M=130 F= 70 T= 200		
	Equip TEVET institutions with appropriate equipment,T&L materials;	Procure and distribute appropriate equipment , T/L materials	Equipment, T/L materials	Procurement has been on-going but at slow pace with few pieces of equipment	All TEVET institutions	Improved learning outcomes	MESVTEE MESVTEE
3. To provide an efficient and appropriate TEVET training that is responsive to the labour market	Integrate entrepreneurship and Medium, Small and Micro enterprise development into TEVET;	Develop Entrepreneurship policy guidelines	Number Entrepreneurship Policy guidelines	TEVET Policy	At least a set of Entrepreneurship policy guidelines developed	A TEVET system that is responsive to the labour market	MESVTEE MESVTEE MESVTEE

Table 14: Planned Activities for TEVET during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Facilitate collaboration between Research and Development and TEVET institutions;	Develop collaborative MoUs	Number of collaborative MoUs signed	No collaborative MoUs signed	10		
	Strengthen the planning, coordination and monitoring of TEVET programmes in order to ensure effective and efficient implementation;	Review institutional management policies in TEVET	Number of Policy reviews	Nil	Approved institutional management policy		MESVTEE MESVTEE
	Strengthen the planning, coordination and monitoring of TEVET programmes in order to ensure effective and efficient implementation; Promote participation of females and LSEN in technical programmes	Harmonise institutional monitoring and evaluation instruments	M&E instrument	2 separate instruments for TTIs and Schools for continuing educations	Approved and operational M & E system		
		Introduce the quota system	Proportion of female and LSEN in TEVET technical programmes	6%	30%		
4. To promote equity in the provision of training	Increase bursary support to the marginalised groups	Review the criteria for accessing financial support	No. of marginalised learners accessing financial support	1000	5000	Wider participation of the marginalised in economic activities	MESVTEE



Science, Technology and Innovation

7.1 Situational Analysis

Science, Technology and Innovation (STI) play an important role in national development. Economic development of any country depends on innovation, science and technological advancement of its people. In this regard, Science and Technology should adapt to the local conditions if it is to fully utilise locally available resources. When it is adaptable, it enhances productivity, creates wealth and improves people's quality of life. During NIF III, the sub-sector will focus on investing in research, development and innovation, and enhancing linkages with industry.

During the last five years, policy and legislative reviews were undertaken to enhance the contribution of science and technology to national productivity and competitiveness. This included the review of the 1996 National Policy on Science and Technology, and the formulation of an Intellectual Property Rights Policy. The Bio-safety Act of 2007 was also enacted. Significant progress was made in infrastructure development and rehabilitation. Three biotechnology laboratories were established at National Institute for Scientific and Industrial Research (NISIR), Zambia Agricultural Research Institute (ZARI) and Seed Control and Certification Institute (SCCI). In addition, laboratories were rehabilitated and re-equipped at NISIR, Tropical Diseases Research Centre (TDRC), ZARI, University Teaching Hospital (UTH), Cancer Diseases Hospital, Central Veterinary Research Institute (CVRI), Chest Diseases Laboratory, Zambia Bureau of Standards and at public universities. Also established were the National Remote Sensing Centre (NRSC) and a key Science, Technology and Innovation (STI) infrastructure.

In terms of human resource capacity, a postgraduate bursary scheme for female scientists was introduced and 18 students benefited from it. With regard to inventions, 20 were developed out of which 12 were by youths through the Youth Inventors Fund. Eight of these utilised the Strategic Research Fund that were established to promote Science, Technology and Innovation. In the area of agriculture, several technologies to enhance crop productivity and competitiveness (e.g. optimal crop rotation, agro-forestry, inoculum use, liming) were developed and disseminated under Research, Development and Innovation (RDI).

In the health sector, an alternative and simpler malaria diagnostic tool was developed. Advances and investigations were also made in traditional medicines and occupational respiratory diseases. In the energy sector, research activities focused on alternative energy sources such as bio fuels (Jatropha, sweet sorghum and ethanol), wind energy and mini-hydro-power generation.

Despite these achievements, Zambia continued to make slow progress towards becoming a Knowledge and Innovation Economy (K-Economy). This is largely due to several reasons including low investments, deficiencies in the STI framework and weak linkages with industry. The general performance of the sector during the past five years has been below average due to weaknesses in coordination, human resource constraints, inadequate modern equipment and insufficient infrastructure. For instance, there was no laboratory with basic science equipment for research. Furthermore, Research and Development institutions operated with staff strength of less than 50 percent. Commercialisation of research and

development was hampered by weak linkages between research institutions and industry and inadequate mechanisms for dissemination of research findings.

Currently, Zambia is experiencing climate change and variability. There is need to investigate how climate change elements such as rising temperatures, change in precipitation and extreme weather events influence development, infrastructure, environment, economy and population. There is also need to adapt technologies and innovations to changing climatic scenarios.

7.2 Main Policies, Objectives and strategies

Though Zambia has made tremendous strides in national development, its research activities in science and technology have remained negligible to make desirable contributions towards its aspirations. During NIF III, the legal and institutional framework will be re-aligned to the Science, Technology and Innovation Policy. In this respect, the following shall be the main policy goals:

- (a) Give priority to the teaching of science and technological subjects in educational institutions at all levels;
- (b) Promote research and innovation; and
- (c) Promote collaboration between industry and research institutions.

Therefore, in order to enhance research and technological advancement, objectives of the NIF III will be as follows:

- (a) To strengthen the human resource capacity to undertake R&D and innovation;
- (b) To increase access to science, technology and innovation;
- (c) To promote quality assurance;
- (d) To enhance the output of the science, technology and innovation system;
- (e) To strengthen the commercialisation, transfer and diffusion of technologies; and
- (f) To popularise science, technology and innovation.

In order to achieve the policy goals and objectives, the following shall be the main strategies during NIF III period:

- (a) Build capacity for researchers and postgraduates;
- (b) Establish technology demonstration, incubation, piloting and other R&D facilities;
- (c) Establish a national research centre and specialised research units in provinces to coordinate research activities;
- (d) Improve and expand facilities for teaching science and technical subjects;
- (e) Create science and technical schools, colleges and universities;
- (f) Equip science and technological institutions at all levels;
- (g) Facilitate establishment and compliance to professional ethics;
- (h) Establish centres of excellence for education, science, technology and innovation;
- (i) Review Science and Technology curricula;
- (j) Facilitate the accreditation of laboratories;
- (k) Promote linkages and strengthen coordination in education and STI at local and international levels;
- (l) Promote processing technologies for agro produce and wild foods;
- (m) Preserve genetic resources for Indigenous Knowledge System (IKS);
- (n) Establish industry and research institutional linkages;
- (o) Promote public awareness of the role of science, technology and innovation in society;
- (p) Establish effective Information, Education and Communication systems;
- (q) Promote and support the publication of scientific journals; and

(r) Facilitate the improvement of standards in science and technology journalism.

7.3 Planned Activities

Table 15 shows indicative activities under Science, Technology and Innovation during the 2011-2015 period:

Table 15: Planned Activities for Science, Technology and Innovation during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
1. To strengthen the human resource capacity to undertake R&D and innovation	Build capacity for researchers and postgraduates	Expand the postgraduate programmes at universities	No. of post graduate programmes at public universities	CBU= 18 UNZA=83 MU=0	CBU= 26 UNZA= 100 MU=10	Improved capacity to undertake technological innovation and development	
		Expand training programmes in identified areas of R&D	No. of professionals trained	7	80		
2. To increase access to science, technology and innovation	Establish technology demonstration, incubation, piloting and other R&D facilities;	Establishing incubation, common user facilities	Number Incubation facilities	1	3	More technologies and innovations developed	Research Institutes Universities Enterprises
			Number Technology stations/hubs	0	3		
			Number Science camps	1	15		
	Establish a national research centre and specialized research units in provinces to coordinate research activities;	Revamp NISIR and establish specialised research units in provinces (Luapula, Western, North Western)	Number Marine sciences research station	0	1 in Luapula		
			Number Renewable energy research province	0	1 in Western Province		
			Number Industrial materials & mineral research stations	0	1 in North Western		

Table 15: Planned Activities for Science, Technology and Innovation during the 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Improve and expand facilities for teaching science and technical subjects;	rehabilitate science and technology specialised rooms	No. technology specialised rooms rehabilitated at secondary	No data currently available	In 150 schools		
			No. technology specialised rooms rehabilitated at tertiary	No data currently available	In 30 tertiary institutions		
		Construct Science and technology specialised rooms (labs, workshops etc)	No. Specialised rooms constructed at secondary school level	None	240 specialised rooms		
			Number of patent applications made by research institutes/year	0	40		
	Improve technological expertise and access	Increase the number of technologies commercialised and patent applications registered	Annual average scientific publications per million population	13	200		
		Increase the number of publications in scientific journals	No. of Technical secondary schools	3	10		
	Create science and technical schools, colleges and universities;	Construct technical secondary schools	No. of Science and Technological universities	0	3		

Table 15: Planned Activities for Science, Technology and Innovation during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
		Construct science and technological universities	% of science and technology institutions with adequate science and tech equipment	0	30%		
	Equip science and technological institutions at all levels	Provide science and technology equipment	Number of Institutions with well equipped science & technology (S&T) labs	No data available	At least 25% with well equipped S&T labs		
3. To promote quality assurance	Facilitate establishment and compliance to professional ethics			0	3	Increased scientific innovations	Research Institutes Universities Enterprises
	Establish centres of excellence for education, science, technology and innovation		Science camps	1	15		
	Review Science and Technology curricula		Joint research projects	0	5		
	Facilitate the accreditation of laboratories Establish	Facilitating joint projects	Joint publications	1	20		
			Rehabilitated laboratories	1	6		
4. To enhance the output of the science, technology and innovation system	Rehabilitate and develop well equipped infrastructure for research	Rehabilitation of existing facilities	Science complex	0	1	Increased scientific	Research Institutes

Table 15: Planned Activities for Science, Technology and Innovation during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	and development	Construction of science complex	SDF	2	30	innovations	Universities Enterprises
5. To strengthen the commercialisation, transfer and diffusion of technologies.	To popularise science, technology and innovation	Staff development	Short term professional	5	50	Increased cross pollination of scientific ideas	Research Institutes Universities Enterprises
			Number of joint projects per year	5	25		
		International collaboration	Joint publications per year	3	25		
			Basic sciences research projects per year	10	30		
		Postgraduate programme for strategic areas	Applied research project per year	2	50		

8.1 Situational Analysis

Youth and Adult literacy in Zambia aims to empower its citizens to effectively participate in national development through the provision of reading, writing, and functional skills. This sub-sector caters for adults/youths that have never been to school and also includes school dropouts. Currently, youth and adult literacy is offered at adult literacy centres countrywide.

The quality of adult literacy provision varies from provider to provider. There is no national curriculum followed by all providers. The Ministry of Community Development, Mother and Child Health (MCDMCH) uses primers that were developed for functional literacy in the 1970s. Various groups have developed functional literacy materials on topics such as health and nutrition but most of these materials were developed in the 1970s and require updating since the context and issues have significantly changed. Other providers of adult literacy have used the *'REFLECT'* methodology to generate themes and content for use in adult literacy classes. The existence of such materials provides the stakeholders working in adult literacy with a basis to strengthen the programmes. In addition, the Ministry, through the Curriculum Development Centre (CDC), is developing the core curriculum and the accompanying teaching/learning materials. The Ministry is also developing a national policy that will guide and regulate adult literacy provision and practice in Zambia. The scenario at learning centre level is that there are few and outdated teaching and learning materials resulting in centres using materials meant for children. The limitation in languages of instruction has also affected production of materials for teaching and consequently excludes other people. The MCDMCH and the University Of Zambia Department of Adult Education have been training adult educators and providing continuing education courses at certificate, diploma and degree level in adult education.

The Ministry assumed the portfolio of offering literacy education in 2004. Since then, it has conducted several activities such as convening a number of stakeholder meetings, establishing the adult literacy technical committees, and training of Ministry staff in adult literacy methodologies. It is also developing the National Policy for Adult Literacy Education. The CDC staff is also developing the core-curriculum for adult literacy education with accompanying teaching and learning materials.

There is a strong link between level of under-development and illiteracy. The regions with high illiteracy in Zambia are generally also the ones with low income levels and low child participation in education. Female illiteracy is generally high mainly because many parents, particularly those in rural areas, attach greater importance to the education of male children and see the education of girls as only good for marriage and not for employment. Though geographically broad in coverage, youth and adult literacy programmes cover only a small number of people largely due to a host of reasons, including: limited funding; very narrow curriculum coverage; non availability of teaching and learning materials especially for LSEN; inadequate infrastructure; no trained instructors; lack of coordination and linkages among relevant stakeholders; unrepresentative statistics; poor remuneration for the few instructors; no bursary scheme to support the OVCs; lack of strategies on monitoring and evaluation; and no youth and adult literacy structures in the education system.

The Ministry is developing a national policy for the youth and adult literacy education. In addition, a technical committee is in place and CDC is developing the core curriculum for youth and adult education to accompany the teaching and learning materials that have been developed. Most participants in adult literacy centres are women. In 2007, there were 2,091 literacy classes with 41, 894 learners of which 32, 324 were females.

Financing of adult literacy education and adult learning, in particular, has been a major challenge. Over the years, only 0.02% of the annual allocation to education and skills has been disbursed to adult literacy education. Bursaries and scholarships are not extended to adult literacy education nor does the free primary education policy cater for adult learners. Most illiterate people are vulnerable and poor, hence, they often fail to pay the little tuition fees demanded by providing institutions. In addition, materials are not distributed to adult learners as is done to learners at primary and secondary school levels. Furthermore, the impact of HIV and AIDS has affected more people who are poorer and illiterate.

8.2 Main Policies, Objectives and Strategies

The immediate focus of the sub-sector during NIF III is policy development which will clarify the roles of the public sector and civil society in literacy education delivery. The Ministry will work towards the establishment of adult literacy centres in selected areas, especially in the poorer regions. In light of this, the policy focus shall include the following:

- (a) adopt a comprehensive social protection policy, which will guarantee all citizens access to basic services, and provide additional support to those who face special challenges in meeting their basic needs; and
- (b) increase empowerment and participation of adults and the youth in certain areas affecting their well-being and livelihood and enhance observance and protection of their rights in order to build a sound human resource base. This will also call for increased budgetary allocation to the sector in line with its increased responsibilities.

Arising from the government policy aspirations above, the following will be the main objectives of adult and youth literacy during the NIF III period:

- (a) To increase access to Youth and Adult Literacy Education;
- (b) To improve the quality of Literacy Education;
- (c) To promote efficiency and effectiveness of literacy programmes; and
- (d) To promote equity in youth and adult literacy programmes.

The following strategies will be used to achieve the policy objectives:

- (a) Expand educational facilities and vocational training;
- (b) Raising awareness levels of adult literacy programmes;
- (c) Collaborate with industry to provide learnership/apprenticeship practical training;
- (d) Collaborate with line ministries and other stakeholders to coordinate youth and adult literacy;
- (e) Deploy qualified staff and upgrade skills of existing staff;
- (f) Promote creativity in the provision of life skills;
- (g) Re-introduce literacy and nutrition programmes in low income communities;
- (h) Promote gender education to literacy learners particularly female youths and instructors;
- (i) Develop specific literacy programmes for youths, particularly female youths, to address maternal and child mortality, malnutrition, HIV prevention, and family planning; and
- (j) Mainstream cross cutting issues in adult literacy programmes.

8.3 Planned Activities

Table 16 shows indicative activities under the Adult Literacy sub-sector during the NIF III period:

Table 16: Planned Activities for Adult Literacy during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
1. To improve access to Adult Literacy Education	Expand the number of adult literacy centres	Establish adult literacy centres	Number of literacy centres	1,200	1,300	Increase literacy rate	MESVTEE MCDMCH MYS Civil society
	Raising awareness levels of adult literacy programmes	Conduct nationwide Mass Literacy campaign programmes	Number of Mass Literacy campaign programmes	1 per year	7 per year		
		Increase access of youth and adults to literacy programmes	No. of youth and adults enrolled	41,893 (2007) M=9,569 F=32,324	60,000 M=15,000 F=45,000		
2. To improve the quality of literacy education	Train adult literacy instructors	Implement the 'Yes I Can' Literacy Training Methodology	Number of developed and upgrade literacy materials	1,800	48,000	Increase literacy rate	MESVTEE MCDMCH MYS Civil society Agriculture, Commerce, Labour, Local Govt
		Conduct training and re-training of literacy providers	Number of centres using the 'Yes I Can' methodology	Nil	600		
	Develop a responsive adult literacy curriculum	Develop and upgrade relevant materials for literacy and post literacy programmes	Number literacy providers trained	18	300		
	Produce adult literacy materials and use ICTs to promote adult Literacy	Establishment of tele-centres to promote adult Literacy	Number of tele-centres established	Nil	300		

Table 16: Planned Activities for Adult Literacy during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
		Establish Adult literacy Multimedia Centres in rural areas	Number of multimedia Adult literacy centres	Nil	100		
3. To promote equity in the delivery of adult literacy programmes	Embark on sensitising the community on the benefits of literacy	Establish adult literacy programmes suitable for LSEN	Number of established and operational adult literacy programmes suitable for LSEN	Nil	One per province	Reduced illiteracy rate	MESVTEE MCDMCH MYS Civil society
		Provide equitable access to youth and adult literacy	Percentage of LSEN accessing adult literacy programmes	No data available	10%		
	Mainstream HIV and AIDS and reproductive health in adult literacy programmes	Develop gender sensitive literacy curricula and education materials on risky behaviour, reproductive health, HIV/AIDS prevention	Gender sensitive literacy curricula and education materials in place	Appropriate learning and teaching materials not developed	Curricula and educational materials in place		

Teacher Education, Supply and Management

9.1 Situational Analysis

The quality and effectiveness of the education system depend heavily on the quality of its teachers. They are the key persons in determining success in meeting the system's goals. In view of this, the calibre of teachers and the status of the teaching profession are of paramount importance. The educational and personal well-being of learners in schools, thus, hinge crucially on teachers' competence, commitment and resourcefulness.

There are 14 public Colleges of Education in Zambia out of which eight train teachers for the primary school level, two for the junior secondary level (Grades 8-9), two for senior secondary level (Grades 10-12) and two provide in-service training. David Livingstone and Kitwe Colleges of Education also offer Early Childhood, Care and Development Education (ECCDE) training. In addition, two Technical and Vocational institutions namely, Luanshya TVTC and Evelyn Hone College of Applied Arts and Commerce, provide teacher training for secondary school level. At the same time, the public colleges of education are complimented by the private colleges which are dotted all over the country. There are three public and 16 private universities offering training at degree level.

Over time the annual average number of teacher output has been around 3,000 for primary teaching and 1,500 for secondary teaching, bringing the total to 4,500. However, this does not meet the demand for teachers at various levels within the education delivery system considering the fact that there has been an increase in the number of classrooms and pupil enrolment. Table 17 summarises the ideal pupil and teacher requirements in 2009 based on the education statistical bulletin.

Table 17: Pupil and Teacher Requirements in 2009

	Grade 1-7 (Primary School)	Grade 8-9 (Junior Secondary School)	Grade 10-12 (Senior Secondary School)
Number of Pupils	2,956,821	423,624	275,324
Students per class	40	35	35
Number of Classes	74,221	12,104	7,867
Teacher requirement per class	1	1.5 +2	1.5 +2
Total number of teachers required	74,221	18,158	11,803
Total number of teachers available	51,091	20,924	2,341
Teacher variance	23,130	-2,766	9,462

Analysis based on Ministry of Education Statistic Bulletin 2009 data

At Primary School level, there was 68.8% of the required number of teachers. At Junior Secondary School level, the qualified number of teachers appeared to be in excess when in actual fact most of these teachers were seconded to teach at Senior Secondary School level.

At Secondary School level, there was an acute shortage of teachers of approximately 80.2%. This indicates that in 2009 alone there was a total shortage of 32,592 teachers at primary and secondary school levels.

On the other hand, the total output from public and private colleges and universities for both primary and secondary school levels does not exceed 4,500 per year. This problem is more acute at Senior Secondary School level where teachers are expected to have a degree qualification in their teaching subjects. In the year 2010, out of 14,207 teachers in secondary schools only 2,345 teachers or 16.5 percent had degree qualifications. More acute is the shortage of qualified teachers of Mathematics and Science. For example, out of the 1,709 teachers required for Mathematics, only 183 graduates were available and only 607 graduate teachers were specialised in Science instead of the required 2,509.

In 2010, the country had about 885 teachers with degree qualifications in Social Sciences out of the required 6,508. The output from other universities in the country was 120 graduates in Social Sciences annually, which was far from meeting the national demand for Social Science teachers with degree qualifications required at Secondary School level.

The requirements for Mathematics and Science teachers at secondary school level are enormous and require urgent intervention. To this effect, the Ministry has embarked on the *Fast Track Training* initiative especially for teachers of Science and Mathematics to address this challenge. In addition to upgrading teachers using the fast track initiative, a selected number of colleges of education will be converted to universities to increase the output of teachers with degree qualification. During the NIF III period, three institutions have been earmarked for conversion to universities. The Copperbelt College of Education has been earmarked for transformation into a University of Education (Mukuba University of Education) specialised to train teachers of Mathematics and Science. In addition, Mulakupikwa University, which is under construction, will offer training in Science and Mathematics (including Applied Science) once operational.

Nkrumah College of Education will be converted to Nkrumah University of Education to focus on training of teachers of social sciences for Secondary School level and shall transfer training of Mathematics and Natural Sciences teachers to Mukuba University of Education. It is anticipated that this measure will enable Nkrumah University of Education to substantially increase capacity for production of teachers of social science at Secondary School level in the country. Chalimbana University will offer degree programmes for primary and early childhood education teaching. It will also focus on the upgrading of serving primary school teachers through in-service programmes.

The performance of pupils at primary school level in reading, numeracy and literacy has been consistently low over the years as indicated in the National Assessment and the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) results. The main causes for this situation have included inadequate teaching and learning materials, teacher accommodation and classroom space for learners. Another cause is the poor reward system that corresponds to the qualifications that primary school teachers hold that makes such teachers feel that it is better for them to teach at secondary school than at primary school level since the primary school structure has no salary scale for degree holders.

Teacher Resource Centres (TRC) will continue offering in-service training to serving teachers and giving support to school based Continuing Professional Development (CPD).

In terms of human resource the Ministry has also introduced Education Leadership and Management training programme to strengthen effective school management.

Regarding teacher supply and management, the Government's concern is focused principally at quantitative and qualitative improvements. At the qualitative level, the government recognizes that without sufficient and well-motivated teachers, most of the 'quality targets' would be difficult to achieve.

It is a known fact that library facilities are an important component in the education system. However, the situation is such that these facilities are in short supply at both institutional and public levels. The country has six provincial libraries which are dilapidated and with no internet connectivity.

9.2 Main Policies, Objectives and Strategies

In the area of teacher education, supply and management, good governance, efficient and effective system of administration and financing of teacher education shall be targeted. Co-ordination of quality programmes facilitated by well qualified and motivated human resource shall form the cornerstone of teacher education endeavours.

In light of the above, during the NIF III period, the main policy aspirations of the Ministry in the area of teacher education, supply and management will be:

- (a) Promote excellence in the offering of diverse and national development-oriented teacher education and training programmes, supply and management;
- (b) Encourage greater involvement of stakeholders, particularly the private sector, in the training and supply of teachers;
- (c) Meet the national quantitative requirements of the educational system through increased output of pre-service and in-service teacher education in order to achieve the MDGs and EFA goals;
- (d) Provide opportunities for specialised education and training of teachers in the areas of ECCDE, primary and secondary education as well as HIV and AIDS education, life skills, population and family life education, and environmental education;
- (e) Upgrade Teacher qualifications to desirable levels; and
- (f) Promote the concept of the library as an essential learning resource in all of its schools and colleges.

The main objectives of the Ministry will be as follows:

- (a) To facilitate teacher qualification upgrading for both pre-service and in-service teachers;
- (b) To improve the quality and relevance of teacher education curriculum;
- (c) To promote the production of quality and relevant Science, Mathematics and Technology teaching and learning materials;
- (d) To increase output of pre-service teacher education to desirable levels;
- (e) To improve efficiency and effectiveness in the teacher education, supply and management;
- (f) To improve equity in teacher training, supply and management; and
- (g) To improve the reading culture.

In order to attain the above stated objectives, the Ministry will implement the following main strategies:

- (a) Upgrade teacher education institutions;
- (b) Promote excellence in the delivery of diverse and national development-oriented teacher education and training programmes;
- (c) Upgrade qualifications of teachers at both primary and secondary school levels;
- (d) Review existing curriculum;

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- (e) Facilitate greater and more effective involvement of other key stakeholders in teacher education, supply and management;
 - (f) Promote access to teacher education for the vulnerable learners;
 - (g) Integrate cross cutting issues (HIV and AIDS, gender, life skills, and Special Education) into the teacher training curriculum;
 - (h) Facilitate and provide quality and development-oriented teacher education programmes;
 - (i) Review and implement appropriate methodologies to strengthen the systems for initial teacher training, management and support;
 - (j) Expand the capacity of teacher education institutions;
 - (k) Review and implement appropriate methodologies in the areas of delivery of services targeting Learners with Special Educational Needs (LSEN): guidance and Counselling Services in schools and institutions of higher learning, science and mathematics in learning institutions;
 - (l) Provide for appropriately stocked, adequately funded and properly staffed library as the standards facility to be provided at every school and colleges; and
 - (m) Facilitate and promote teacher supply by non-public providers.

9.3 Planned Activities

Table 18 shows the indicative activities under Teacher Education, Supply and Management during the NIF III period.

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
1. To facilitate teacher qualification upgrading for pre-service and in-service teachers	Upgrade teacher education institutions	Upgrade colleges of education offering ZATEC to diploma level courses	Number of colleges upgraded	3	14		
		Upgrade colleges of education to universities	Number of colleges upgraded into universities	0	3		Colleges of Education
	Upgrade the qualifications of lecturers and teachers	Training of Lecturer	Number of Lecturers with desirable qualification	TBD	All Lecturers		
		Qualification upgrading of teachers	% of primary level teachers with appropriate qualifications	82.6%	90%		
		Qualification upgrading of teachers	% of secondary level teachers with appropriate qualifications Grade 8-9 Grade 10-12	¹⁴ Gr. 8-9= 100% Gr. 10-12= 16.5%	Gr. 8-9= 100% Gr. 10-12= 45%		
		Implement Fast Track Training initiative for diploma holders	Number of teachers trained to diploma level	0	6,000		

¹⁴ Most of the teachers with diplomas are teaching at Senior Secondary (Grades 10-12), and others are administrators in primary/basic schools. There will be need for redeployment of these teachers once the basic/high school system is phased out and replaced with primary/secondary system.

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
		Increase output of pre-service teacher education to desirable levels	No. of pre-service teachers graduating per year	4,800 total m/f not available	7,800 total M=3,900 F= 3,900		
		Develop college curriculum framework	Curriculum framework	Existing curriculum framework	New curriculum framework		
2. To improve the quality and relevance of teacher education curriculum	Review the existing college curriculum	Carry out curriculum review	Curriculum	Existing curriculum	New Curriculum		
		Provide in-service teacher training at primary level	# of teachers receiving in-service training at primary level	Data currently not available	30% of primary school teachers	Improved teaching performance	
3. To improve the quality of teaching and learning	Enhance capacity of teachers in quality service delivery	Provide in-service teacher training at secondary level	# of teachers receiving in – service training at secondary level	Data currently not available	45% of secondary school teachers	Improved teaching performance	
		Provide in-service teacher training at TEVET	# of instructors trained in TEVET pedagogy and skills	Data currently not available	50% of the instructors	Improved teaching performance	
		Provide pre-service teacher training at primary level	# of teachers trained in pedagogy and phonics	3,000 per year graduate	4,500 teachers per year graduating	Improved teaching performance	

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
		Provide pre-service teacher training at secondary level	# of teachers trained in pedagogy, science and mathematics	Available graduate teachers in schools: Maths=183 Science= 607	Targeted graduate teachers in schools: Maths=700 Science= 1,200	Improved teaching performance	
		Construct NSC and Satellite Centres	Number of centres constructed	No National Science Centres	1 National Science Centres		
4. To promote the production of quality & relevant Science, Mathematics and Technology T&L materials	Improve SMT infrastructure	Rehabilitate Satellite Centres	Number rehabilitated	3 Satellite Centres	11 Satellite Centres		
		Construction of teacher education institutions	Number of colleges constructed	0	2		
5. To increase output of pre-service teacher education colleges	Increase enrolment in existing institutions	Construct additional infrastructure in colleges of education	classes added	TBD	TBD		
		Lobby for partnership with stakeholders in teacher education service provision.	Percentage enrolment in non-public institutions	Data not currently available	25%		
	Facilitate greater and more effective involvement of other key stakeholders in teacher education, supply and management.	Increase ODeL activities in teacher education	Number of colleges offering ODeL	4	10		

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
	Promote alternative modes of teacher education	Increase in-service training for the teachers to appropriate qualification	% of SMT teachers	Teachers in Science = 24.2% Maths = 16.5% Technology = 0%	Teachers in Science= 50% Maths= 45% Technology= 8%	Resource availability	ESS, P&I, HRA and Ministry of Finance
6. To improve efficiency and effectiveness in the teacher education, supply and management	Increase Teacher supply with relevant qualification	Implementing SBCPD program at all levels	Number of institutions managing SBCPD effectively	3 provinces	All Provinces		
	Strengthen the systems for Continuing Professional Development	Rehabilitate Provincial, District and Zone Resource Centres	Resource Centres	none	All		
		Construction of new zonal resource centres	Zonal resource centres	None	50		
		Procure library materials	Restocked libraries	none	All provincial and district libraries		
		Roll-out the SMASTE SBPD programme	Number of provinces conducting SBCPD	3	10		
		Upgrading of under qualified teachers	Number of teachers upgraded	Nil	6,500		

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
	Ensure that all teachers holding or taking up management positions receive appropriate training.	Operationalisation of the Teaching Council	Teaching Council	none	Teaching Council in place and operational		
	Facilitate the Establishment of a Teaching Council	Teacher recruitment and deployment	Pupil Teacher Ratio	53:1	pupil Teacher ratio of 40:1 on average	Resource availability	ESS, P&I, HRA and Ministry of Finance
	Increase number of teachers in schools	Provide ELM training	Percentage of school managers trained	Less than 10% trained	45% of school head teachers & deputy head teachers	Improved management and more efficient education system	P&I, HRA and Ministry of Finance
	Improve School management	Monitor teacher attendance through inclusion in annual school census	% of Teacher attendance in primary	Data at district level but not yet included in school census or EMIS	75%	Resource availability	P&I, HRA
			% of Teacher attendance in junior secondary	Data at district level but not yet included in school census or EMIS	80%		
		Revise education curriculum	Curriculum	None	Revised curriculum		ESS
7. To enhance equity in teacher training, supply and management	Strengthen special education and SMT in the curriculum in all colleges	Provide bursaries to vulnerable learners	Number of vulnerable learners on bursary support	Data not currently available	1% of the learners	Resource availability	MESVTEE, Line ministries CP , FBO and NGO

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
	Increase support for vulnerable learners	Procure facilities and equipment for LSEN	Appropriate facilities and equipment	Data not currently available	40% of the Teachers' Colleges/Universities	Resource availability	MESVTEE, Line ministries CP, FBO and NGO
	Provide specialised services for Learners with Special Educational Needs (LSEN)	Review and revise guidelines and course materials for teacher education programmes	Guidelines and course materials for teacher education	Out-dated guidelines and course materials	Revised guidelines and course materials	Resource availability	ESS
		Conduct In-service training of teachers in cross cutting issues	Percentage of teachers trained in cross-cutting issues	No data available	M= 45% F=45% T= 45%	Resource availability	
	Provide guidance and counselling services	Establish a home ownership scheme	Number of teachers facilitated with home ownership schemes	Nil	M= 300 F= 300 T= 600	Resource availability	ESS, P&I, HRA and Ministry of Finance
	Integrate cross cutting issues into the teacher training curriculum	Facilitate in the establishment of more public libraries and renovation of existing	Development of National Library policy	None	National Library Policy		
	Provide incentives to Teachers		Construction of 3 national libraries	6	9		

Table 18: Planned Activities for Teacher Education, Supply and Management during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicator			Expected Outcome	Core Implementers
			Indicators	Baseline (2009)	Targets (2015)		
8. Improve the reading culture	Provide for appropriately stocked, adequately funded and properly staffed library as the standards facility to be provided at every school and colleges		Rehabilitation and networking libraries	0	6		

10.1 Situational Analysis

Higher education is of central importance to the economic and social development of a country. The activities of institutions of higher education and the recipients of higher education advance and preserve a society's intellectual, scientific, cultural and artistic endeavours. The Government recognises its responsibility to safeguard and uphold the traditional role of higher education. Universities in Zambia operate under legislation which makes them responsible to Parliament through the Ministry of Education, Science, Vocational Training and Early Education (MESVTEE). The legislation confers on them academic freedom and managerial autonomy. Academically, each university is responsible for determining its own programmes of instruction at all levels, determining and regulating the requirements for admission, regulating and conducting examinations, conferring degrees and other awards, and promoting, coordinating and controlling the direction of research. Each university engages its own staff, manages its own affairs, charges fees, and carries out any business or undertaking that seems proper to it.

The universities operate within a general policy framework articulated by the Government and the two cardinal principles of this policy are that these institutions must be responsive to the real needs of Zambia and must, on merit, win the respect and proper recognition of the university world.

Currently, only eight percent of school leavers access public universities. Despite the increase in the number of private universities, access to university education remains a serious challenge. Government, in its efforts to increase access to public universities, has expanded infrastructure in all the three public universities¹⁵. As a result of this intervention, the Government has managed to increase university enrolments from about 14,000 students in 2008 to 20,000 in 2010. In addition, the government has entered into Public Private Partnerships (PPP) that will develop various infrastructures at the three public universities.

In addition to infrastructural expansions at the three public universities, Government has begun the process of transforming Nkrumah College of Education, Copperbelt Secondary Teachers College (COSETCO), Palabana Dairy Training Institute and National In-Service Teachers College (NISTCOL) into public universities. Furthermore, Government is establishing new public universities at Lubwa and Mulakupikwa in Muchinga Province. Plans are also underway for Government to establish at least one public university in each Province. The government has also created an enabling environment for the establishment and expansion of private universities in the country.

Public universities are facing major challenges such as critical shortage of teaching staff, inadequate physical facilities, equipment and training materials, resulting into the quality of university education being compromised. In addition, public universities have inadequate support services such as library holdings, health services, staff and student amenities, and ICT infrastructure and availability of necessary transport. All these facilities play an important role in determining the quality of those who emerge from institutions of higher education. The government has started the process to establish the Zambia National

¹⁵ These are University of Zambia, Copperbelt University and Mulungushi University.

Qualifications Authority (ZNQA) to register institutions and accredit qualifications as provided for under Act No. 13 of 2011.

The public universities have over the years set tuition fees in collaboration with the Ministry. Where the fees have been seen to be too high, the Ministry has intervened so as to allow more access by Zambians. It is, however, increasingly being accepted that, in order to improve operations of public universities, economic fees that reflect the real cost of providing higher education to students should be charged. In order to maintain and improve standards, the government is reviewing the student financing system. Since 2004, students have been on a loan scheme (from bursary), but no tracer system has been implemented to follow up the graduates to pay back the loan as per statutory instrument on the loan scheme.

Private universities have expanded in recent years. The Government has, thus, recognised the need to put in place mechanisms for coordination and regulation of higher education in order to ensure quality and relevance.

10.2 Main Policies, Objectives and Strategies

The key reforms will include the revision of the Education Act of 2011 as well as the repeal of the Universities Act of 1999. The Universities Act will be replaced with a more comprehensive Higher Education Act. This new legislation will provide for regulating the establishment, organisation, governance, management and funding of higher education institutions. The Ministry aims to promote the coordination and harmonisation of higher education. Government will ensure that universities establish suitable quality assurance and public accountability systems and that public financing should be on a shared basis between the Government, the institutions themselves, and students. In this regard, public higher education institutions are also expected to develop strategies for widening their resource base.

The Government will increase the number of public universities by converting the existing colleges of education (and some other colleges) into public universities. Government will also ensure that beneficiaries of bursaries either repay or “work off” the benefit they received so that the bursary fund is essentially a revolving fund. Further, a national research centre to co-ordinate research activities will be established.

The Ministry plans to establish a Higher Education Authority for the co-ordination of all higher level education. The Authority will have advisory, planning, quality assurance, financial, and administrative functions. The quality assurance function of the Higher Education Authority would include responsibility for the diplomas, certificates and other awards of all non-university institutions. Responsibilities presently exercised in this regard by the Examinations Council of Zambia (ECZ) would be transferred to the Authority.

The objectives of higher education during NIF III will be as follows:

- (a) To increase access to university education;
- (b) To improve quality and relevance of programmes offered in university education institutions;
- (c) To improve efficiency and effective regulation and management of universities; and
- (d) To increase university involvement in research and development

The following strategies will be used to achieve the policy goals:

- (a) Improve and increase infrastructure in university education institutions;
- (b) Transform targeted colleges into public universities;

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- (c) Enhance the supply of teaching and learning materials and equipment;
 - (d) Establish mechanisms to regulate quality of university education;
 - (e) Strengthen the staff development and management programmes in the institutions of university education;
 - (f) Review the curricula and align them to the societal needs and for the benefit of the individual;
 - (g) Strengthen the management and administration of universities;
 - (h) Strengthen the student financing system;
 - (i) Develop and strengthen linkages between institutions of higher education and stakeholders;
 - (j) Improve the conditions of service for staff; and
 - (k) Strengthen the capacity of the universities to undertake research.

10.3 Planned Activities

Table 19 shows the indicative activities under University Education during the NIF III period:

Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
1. To increase access to higher education;	Improve infrastructure in higher education institutions;	Construct, rehabilitate and maintain infrastructure	No. constructed	3 public universities	2 public universities constructed		MESVTEE, Public Universities and Private Sector
			No. rehabilitated	3 public universities	2 public universities rehabilitated		
	Transform targeted colleges into public universities;	Convert 5 colleges into Universities	Colleges to be converted	5 colleges	5 colleges converted into universities		
	Increase enrolments	To increase access to university education	Percentage increase in enrolment by type of programme	3 public universities currently operational	2 new public universities completed and operational		
	Establish mechanisms to regulate quality of Higher Education;	Repeal the University Act	University Act	University Act of 1999	New university Act		
		Establish the Higher Education Authority	Higher Education Authority	No Higher Education Authority	Higher Education Authority in place and functional		
2. To improve quality and relevance of programmes offered in institutions of	Review the curricula and align them to the societal needs and for the benefit	Conduct review of public university	Curricula improved	Old curricula	All curricula reviewed	Resource availability	MESVTEE, Public Universities and

Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
university education	of the individual;	curricula	Number of industry and professional bodies linked to universities	Insufficient involvement of industry and professional bodies in university education	Number of MOUs or Partnership agreements signed		Private Sector
	Strengthen staff development and management programmes at public universities	Review Staff development and management programmes	Effective staff Development Programme operational	No data available	At 100 Masters and 50 PhDs programmes annually	Resource availability	
			Academic staff appraisal and rating system in place	No data available	System in place and operational		
	Improve the quality of equipment in classrooms and laboratories	Provide new equipment and furniture in classrooms and laboratories	New equipment and furniture	No data available	50% of all classrooms and laboratories in existing universities have new equipment and furniture	Resource availability	
3. To improve efficiency and effective regulation and management of institutions of university education	Establishment of the Higher Education Authority	Develop legal framework for the establishment of the Higher Education Authority	Legal framework in place	None	Legislation passed	Resource availability	MESVTEE, Public Universities and Private Sector

Table 19: Planned Activities for University Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
	Improvement of the general management and financial accountability of public universities	Develop a decentralised accounting system	Decentralised accounting system in place	No data available	All districts using DeFMIS	Resource availability	
	Improvement of financing mechanism	Improve financing mechanism for higher education	Financing mechanism	Not sustainable	sustainable		
	Cultivate strong partnerships with other institutions	Establishment of partnerships and linkages with strategic institutions and other institutions of learning	Partnerships and linkages in place	No data available	All Faith Based Organisations, Private education providers	Resource availability	
4. To increase university involvement in research and development	Strengthening the capacity of the universities to undertake research and development	Review research project management system in universities	Number of research projects funded through the graduate studies dept	No data available	100% of all graduate studies in schools managed by the graduates studies departments	Resource availability	MESVTEE & Public Universities
			Review the academic staff reward system to include publication in international journals	No data available	New performance based reward system for research and development		

Table 19: Planned Activities for University Education during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	Baseline (2009)	Targets (2015)		
		Promote International collaboration in research and development	Number of research projects jointly implementation with international partners	No data available	10% of public funded research projects are joint internationally funded		
		Establish Industry-universities research projects	Number of joint research projects	No data available	30% of public funded projects in universities are joint industry-university partnerships		

11.1 Situational Analysis

Consideration of equality in access to education by different categories of learners is important towards the attainment of education for all. Without a conscious effort to ensure that all citizens irrespective of their gender, social status, physical or mental challenges access educational facilities, the country would fall short of registering real achievements in the context of MDGs even when average numbers point to a positive trend. It is in this regard that the Government is committed to ensuring that there is equity in the provision of educational services. Below are some of the pertinent considerations in this regard.

Equity issues such as the implementation of the policy on HIV and AIDS in the Work Place will be supported by the Government. Moreover, the Government will promote inclusive education by integrating children with mild to moderate learning disabilities in the mainstream schools and offer special education to those that require it. In addition, the Government will ensure that all schools and interventions being implemented are learner-friendly especially to learners with special educational needs (LSEN), girls and rural children.

In addition to the above, the Government will build schools as close to the communities as possible; introduce weekly boarding; and put up programmes to cater for the excluded and out of school as well as the rural children. Government will also increase the number of OVCs on bursary support and promote school health and nutrition programmes.

Equity is measured using the Gender Parity Index (GPI), which is defined as the enrolment of girls in relation to the enrolment of boys. In 2010, there were 3,794,219 learners in Grades 1-12. Of this total, 1,872,763 (or 49 percent) were females bringing the national GPI to 0.97, indicating that Zambia is now close to reaching gender parity in the education system. There are, however, significant regional disparities.

The level of participation of females in education, particularly at post-primary levels, has for a long time lagged behind that of males, and the gender gap widens with each level of the system. The factors that affect females' education range from cultural to socio-economic. These factors have exacerbated gender imbalance in accessing education. Another factor impeding gender equality in education, which does not receive appropriate attention, is the lack of safety of learners in institutions of learning, leading to sexual and other forms of abuse of children; particularly females.

There have been various interventions in the Education Sector over the years targeted at eliminating gender disparities in order to mainstream and achieve gender parity in education. These interventions include the re-entry policy that allow pregnant females to return to school after delivery; the promotion of females' education through sensitisation campaigns of traditional leaders; the quota system at public universities; the 'Go Girls' campaign initiative; the bursary support; and the promotion of child-friendly school interventions (through the concept of Care and Support for Teaching and Learning). These interventions were meant to increase the enrolment, retention and participation of girls in education. It has, however, been noted that many girls and parents are not taking advantage of the interventions to enable girls return and continue with their education. For example, the total number of pregnancies for Grades 1-9 trebled from 4,405 in 2003 to 13,769 in 2010, but only 4,876 re-admissions. The Education

Statistical Bulletin (2010) further reported that 89 percent of the reported pregnancies involved learners in Basic schools located in rural areas. These figures are quite alarming more so that those that seek readmission are far less.

There are also varying factors why some girls do not return to school. These factors include:

- (a) Stigmatisation;
- (b) Lack of support from teachers, fellow learners and parents;
- (c) Lack of self esteem amongst those affected;
- (d) Inconsistency in the application of the policy among school authorities and institutions; and
- (e) Inadequate psycho-social counselling in schools and other learning institutions.

Inequities also exist outside the education system which continue to undermine efforts towards the attainment of universal primary education. Traditional schooling in cultural norms during initiation ceremonies, for example, keeps both males and females out of school. In addition, traditional teachings socialise children in norms parallel to formal educational expectations. Boys are taught how to be ‘real’ men while girls are taught how to be good wives. In some parts of rural Zambia, boys spend most of their childhood herding cattle while, in other parts, they engage in fishing to support their families. Another factor is early marriages and teen pregnancies, especially in rural schools as this contributes to high dropout rates of the girl child. The weak implementation of the re-entry policy contributes to this state of affairs. The high number of orphaned children and the long distances especially to secondary schools affect the participation of females as they resort to squatting in village compounds where they are at risk of being sexually abused and exposed to HIV and AIDS.

The Government adopted the National Gender Policy in 2000 and, in 2004, launched the Strategic Plan of Action (2004 to 2008). The National Gender Policy highlights a number of policy areas which include education. It takes into account the convention on the Elimination of all forms of Discrimination Against Women (1979); the Beijing Declaration and Platform for Action (1995); the SADC Declaration on Gender and Development (1997); and the MDGs of 2000.

Orphans and Vulnerable Learners constitute one category of children requiring special attention in relation to equity in the provision of education. In 2010, there were 541,986 orphans learning in Primary School, 107,412 in Junior Secondary School and 61,811 in senior secondary school. As a proportion of the total enrolments (Grades 1-12, orphans comprised as much as 26.1 percent. The number of vulnerable learners receiving bursary support in 2010, on the other hand, constituted only 1.7 percent, 7.9 percent and 6.5 percent of the total enrolments at Primary, Junior Secondary and Senior Secondary levels, respectively. The proportions of females receiving bursary support in 2010 for Primary, Junior Secondary and Senior Secondary School levels were 51 percent, 51.7 percent and 50.9 percent, respectively.

In addition to the bursary support from the Ministry, there are other stakeholders supporting the vulnerable learners such as FAWEZA and CAMFED, International Organisations/Agencies and the Faith and Community Based Organisations. The HIV and AIDS pandemic has exacerbated the challenges the Ministry faces in providing educational services to OVC. The 2007 Zambia Demographic and Health Survey (ZDHS) showed that HIV prevalence among the 15-19 year old females dropped from 6.6% in 2001/2002 to 5.7% in 2007. The number of orphaned and vulnerable children accessing school increased from 645,376 in 2005 to 711,201 in 2010, meaning that more resources for bursary support were required especially for those at secondary, college and university levels where the cost is high.

Government and co-operating partners have also been providing bursary support and loans to learners in tertiary institutions. In terms of human resource capacity, a postgraduate bursary scheme for female scientists was introduced and 18 students benefited in 2011.

Another category requiring special attention with regard to equity is that of Out of School Children. In Zambia, the past decade saw advances in primary school enrolments. Statistics indicate that enrolments at Primary School level increased by over 1.4 million learners from 1.6 million in 2000 to 3.045 million in 2010. Out of this total, 1,525,668 (50.1 percent) were females. In terms of Net Enrolment Rate (NER), this translated into 93.7 percent while completion rate at Grade 7 stood at 91 percent. This meant that 93.7 percent of all children eligible to be enrolled at this level were attending school and highly likely to complete the cycle. Despite this impressive achievement in terms of access, there are an estimated 435,430 children between 7 and 18 years old who are out of school. 16. There are a number of factors that are responsible for this state of affairs which include the following:

- (a) Family dependence on the economic activities of children;
- (b) Impact of AIDS on family organisation and income;
- (c) Increasing number of orphans;
- (d) Growing number of child-headed households;
- (e) High levels of poverty, and
- (f) Teenage pregnancies.

Of special concern to the Government is the fact that these circumstances reduce the school participation of females more than that of males.

Special Education represents an important intervention in addressing issues of equity. The main objective of the Special Education interventions is to advocate the integration/inclusion of learners with special educational needs into the regular school system at all levels to enable them acquire appropriate life skills and education. Physical and sensory impairments cause learning difficulties while gifted and talented children do not get the support they require. According to the Education Statistical Bulletin (2009), there were 202,144 and 5,322 pupils with impairments in Basic and High schools, respectively. The Government recognises that these learners require special education facilities over and above what the mainstream schools offer.

At present, pupils with various special educational needs in the education system represent about 8 percent of all pupils in the country. There has been significant improvement in terms of access, mainly on account of various strategies that the Ministry has put in place such as the Inclusive Schooling Programme (INSPRO) to address issues of disability and provide specialised training and equipment to support special education. Government has also constructed and provided special schools catering for severe and profound learners that cannot be integrated into the ordinary schools.

In spite of the positive interventions thus far undertaken, there remains major challenges that include inadequate and inappropriate teaching and learning materials and equipment; limited human resource with appropriately specialised skills; inadequate screening and assessment tools and systems to address the challenges facing LSEN; and capacity challenges associated to ordinary teachers handling LSEN in ordinary (as opposed to special) schools.

HIV and AIDS continues to compromise efforts aimed at attaining equity. The HIV and AIDS pandemic has exacerbated the challenges the Ministry faces in providing educational services. HIV and AIDS related diseases account for a significant proportion of causes of teacher deaths. Teacher deaths do not only exacerbate inequities in the teaching and learning process but also impact the education sector economically. In view of the increased access to ART, it is likely that the number of learners on ART in the student population will continue to grow over the coming years.

¹⁶ UNICEF

As a way of ensuring that the challenges brought about by HIV and AIDS are better appreciated in the school system, it is Government position that the pandemic and its ramifications should be well integrated into the curricula.

The School Health and Nutrition (SHN) Programme is another intervention aimed at the attainment of equity. It is premised on the understanding that access to and participation in education is greatly influenced by the health status and environment of the learner. Learners who are healthy can more readily attend and participate in school. A healthy school environment is also a prerequisite for effective learning. The SHN programme fortifies the strong and mutually reinforcing relationships between nutrition, health and education. The strategy is premised on the delivery of basic cost-effective public health interventions to learners through schools in four broad areas, namely:

- (a) School-based health services;
- (b) water sanitation and the environment;
- (c) Skills-based health education; and
- (d) School health policies.

The activities currently being implemented include treatment for worms and bilharzias, school feeding, school gardens, skills-based health education, improvement of the environment, water and sanitation and malaria control. The programme, initially piloted in two districts in Eastern Province in 2000, has now expanded to eight of the ten provinces of Zambia, covering a total of 2,500 schools with 1.3 million learners in Basic schools.

The monitoring reports and surveys conducted indicate that learners appeared to have improved their ability to concentrate and learn as a result of the feeding at school. Notwithstanding the successes above, there still remain a number of challenges that include the following:

- (a) Lack of a clear and coordinated organisational and management structure at the Ministry, which has hampered the smooth implementation of the programme;
- (b) Lack of an officially approved SHN policy;
- (c) Weak inter-sectoral coordination resulting in fragmented programme components;
- (d) Lack of a reporting system resulting in poor capture of data at national level; and
- (e) Weak community participation.

The Rural-Urban Dimension of Equity requires special attention. The poverty levels in rural areas have disadvantaged learners in these communities due to limited access to better infrastructure and other amenities that compliment a more positive learning environment. The absence of effective public transport, health facilities, and dependable water and sanitation all come together to disadvantage rural dwellers in ways that negatively affect their schooling. The reluctance of most teachers to serve in rural areas, particularly for those that specialise in science and mathematics, places a major disadvantage on the learners' achievement rates as well as on the options that would be open to them for tertiary level training.

11.2 Main Policies, Objectives and Strategies

The overall objective of the Government's equity strategy under the Ministry is to create conditions that promote equal learning opportunities for all. The aim is to ensure coherence in the implementation of equity policies and strategies by focusing on gender, OVC, community schools, Out of School Children, Special Educational Needs (SEN), HIV and AIDS, and School Health and Nutrition (SHN).

The Ministry will encourage greater involvement of stakeholders, particularly NGOs and Line Ministries, in the provision of quality education to the disadvantaged learners. In order to improve the academic performance of disadvantaged learners, the objectives of the Ministry will be as follows during NIF III:

-
- (a) To increase access and retention of the marginalised learners;
 - (b) To improve the quality of education that is offered to the marginalised learners;
 - (c) To promote efficiency in the running of special schools and special units;
 - (d) To create gender and SEN responsive learning environment; and
 - (e) To strengthen interventions for mitigating the impact of HIV and AIDs on learners and staff.

In order to ensure that the objectives outlined above are achieved, the following are the strategies:

Learners with Special Education Needs (LSEN)

- (a) Construct more infrastructure suitable for LSEN at all levels;
- (b) Improve identification, assessment and placement of learners with special educational needs;
- (c) Promote participation and improve facilities for LSEN;
- (d) Review the curricula suitable for LSEN;
- (e) Provide learning and teaching materials and equipment;
- (f) Facilitate the short and long term training of teachers in the field of Special Needs and Inclusive Education;
- (g) Monitor and evaluate Special Education programmes at all levels
- (h) Review Special Needs and Inclusive Education policy
- (i) Nurture collaboration with other stakeholders in the provision of support to LSEN
- (j) Disseminate the legal provisions of the education act and the Gender Based Violence Act, as well as child rights protection Act
- (k) Establish a comprehensive implementation strategy for gender mainstreaming
- (l) Create child friendly learning environments to improve educational attainment for boys and girls
- (m) Implement programmes aimed at reducing sexual and gender-based violence

Gender

Increase retention of both boys and girls in schools and reduce learner pregnancy incidences

Orphans and Vulnerable Children

- (a) Increase the number of learners accessing bursary support for education; and
- (b) Enhance inter-sectoral approach in the coordination of bursary provision and psycho-social support

HIV and AIDS

- (a) Reduce the impact of HIV and AIDS among learners and teachers/ learners/ instructors by increasing preventive and curative interventions;
- (b) Develop a comprehensive sensitisation programme on the dangers of HIV/AIDS for all learners including LSEN;
- (c) Increase and strengthen HIV and AIDS safe clubs in schools including Special Schools and units

School Health and Nutrition

- (a) Enhance organisational and management structure of SHN programme;
- (b) Enhance inter-sectoral co-ordination of the SHN programme;
- (c) Roll out the implementation of SHN programme to all schools; and
- (d) Improve the provision of nutrition and health services.

Community Schools

- (a) Improve staffing levels in community schools;
- (b) Improve Community School infrastructure; and
- (c) Improve the supply of teaching and learning materials in community schools

11.3 Planned Activities

Table 20 shows the indicative activities under Equity during NIF III period:

Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
1. To increase access and retention for the LSEN	Promote participation and improve facilities for LSEN	Construct specialised schools for LSEN	Number of specialised schools constructed	None	One per province	Reduced illiteracy & unemployment levels among LSENs	
		Construct specialised rooms in regular learning institutions for inclusive learning	Number of specialised rooms constructed	None	300 specialised rooms		
		Identification, assessment and placement of LSENs	Number of learners	No data available	10,000 learners		
		Construct regional assessment centres for Special Educational Needs	Assessment centres for Special Education Needs constructed	Nil	1 SEN centres per province (Total = 10)		
		Community sensitisation & identification of LSEN	Percentage of LSEN enrolled in schools/ institutions	7%	M=10% F=10% T= 10%		
		Lobbying for provision of equipment and materials for LSEN	Number of schools provided with material & equipment	Not determined	1 school per district		

Table 20: Planned Activities for Equity during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
2. To improve the quality of education that is offered to LSEN	Review the curricula to make it suitable for LSEN	Develop new curricula for LSEN	New curricula	Existing curricula	Revised curricula in place	Equal opportunity and participation by all groups	
	Provide learning and teaching materials and equipment	Develop, produce and procure specialised educational materials for LSEN	Number of schools receiving specialized T& L materials and equipment.	All specialised schools with less than 15% of the required T/L materials & equipment	All specialised schools with at least 45% of the required T/L materials and equipment	Equal opportunity and participation by all groups	
	Facilitate the short and long term training of teachers in SEN & Inclusive Education	Train teachers in special education	Number of teachers with special education training	1,411 trained	400 Long-term 8,000 Short-term		
3. To promote efficiency in the running of special schools and special units	Implement strategies to assess Special Education programmes at all levels	Conduct monitoring visits to centres providing education to LSEN	Monitoring reports	No data available	All centres monitored quarterly	Improved performance in institutions with LSEN	
		Conduct national symposium on teaching and learning for LSEN	Report on symposium	Nil	1 annually		
	Review Special Needs and Inclusive Education policies	Develop policy guidelines on Special Needs and Inclusive Education	Education policy	Existing education policy	Revised education policy		

Table 20: Planned Activities for Equity during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
	Nurture collaboration with other stakeholders in the provision of support to LSEN	Hold consultative meetings with all stakeholders in the provision of SEN education	Number of stakeholders	Nil	Semi-annual meetings		
4. To create gender responsive learning environment	Disseminate and facilitate the implementation of legislative and other gender-related instruments	Sensitise schools and communities on various gender-based legislative instruments	Number of zones & surrounding communities sensitised	Nil	1 meeting per zone per annum	Reduced Gender Based Violence	
	Establish a comprehensive implementation strategy for gender mainstreaming	Review curriculum to make it gender responsive	Curriculum	2003 curriculum	New curriculum which is gender responsive		
	Create child friendly learning environments	Develop and implement child protection policies for all schools	Child protection policy	Child Rights Convention	Child protection policy developed and in use		
5. To increase retention among female learners	Enhance learner awareness on sexual reproductive health	Conduct sexual reproductive education to school girls	Percentage of pregnancies	0.847%	0.70%	Improved GPI Reduced drop-out rate	
		Disseminate and implement the revised re-entry policy.	Number of schools with copies of revised re-entry policy document	Re-entry policy available but not fully disseminated	All primary and secondary schools have re-entry policy document		

Table 20: Planned Activities for Equity during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
		Training teachers in guidance and counselling	Number of teachers trained	Data currently not available	6,000 teachers total M=3,000 F=3,000		
6. To increase access to education at all levels for OVC	Increase the number of learners accessing bursary support for education	Provide bursaries to OVC and LSEN	Number of OVC and LSEN receiving bursaries	104, 518	200,000 per annum	Increased number of disadvantaged groups attending school	
		Hold consultative meetings with stakeholders on the coordination of bursary and psycho-social support	Consultative meeting reports	None	Twice per year		
7. To strengthen interventions for mitigating the impact of HIV and AIDS on learners and staff	Reduce the impact of HIV and AIDS among learners and staff	Conduct Teacher Health Days	Report on Teacher Health Day	1 per province	1 per district per annum	Positive behavioural change	
		Commemorate World AIDS Day	Report on World AIDS Day	Commemorated annually	Commemorate annually per district	Reduced HIV and AIDS infections	
	Develop a comprehensive sensitisation programme on the dangers of HIV/AIDS for all learners including LSEN	Conduct sensitisation activities on the dangers of HIV/AIDS for learners.	Number of learners sensitized.	No data	90% of learners sensitised on HIV/AIDS		

Table 20: Planned Activities for Equity during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
		Scale up and strengthen Safe clubs in schools and provide literature on HIV/ADIS.	Number of schools with safe clubs.	No data	Safe clubs created in 90% of the schools		
8. Expand school feeding programme	Enhance organisational and management structure of SHN programme	Provide structural guidelines on the implementation of SHN programmes.	% of schools effectively implementing SHN programmes	None	80% of schools effectively implementing SHN programmes	Improved health and nutrition of pupils Improved pupil attendance	
			Pupil attendance rate	Data at district level but not yet included in school census or EMIS	All schools to provide data on attendance. Format prepared by HQ & disseminated		
	Enhance inter-sectoral coordination of the SHN programme.	Form and coordinate inter-sectoral committees	Number of key stakeholders involved in SHN programmes	Low involvement of key stakeholders in SHN programmes	Coordinating committee in place		
	Improve the provision of nutrition and health services	Coordinate the supply and delivery of food supplements to schools	Quantity and quality of food supplied to schools	937 schools and 320,000 pupils	1,800 schools and 2,000,000 pupils	Improved nutrition and school attendance	WFP MESVTEE

Table 20: Planned Activities for Equity during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	(Targets 2015)		
9. To provide equitable support to community schools	Improve staffing levels in community schools	Recruit and deploy qualified teachers to community schools, especially in rural areas	Number of qualified teachers in community schools	1,745	4,200 trained teachers	Reduced PTR and improved quality of education delivery	

12.1 Situational Analysis

Zambia's education system is currently under-resourced. As a result, there is very little investment in Information and Communication Technology (ICT) in education. In 2010, out of the 8,493 Basic Schools country wide, only 418 had computers for teaching and learning, while only 634 had computers for administrative functions. This is against the pupil enrolment of 3,510,288, bringing the pupil computer ratio to more than 8,000 pupils per computer. Moreover, in the schools where they had computers, most were donations or project-linked. If each computer will be available for 8 hours per day for five days, allowing each pupil an hour of computer use, the total number of computers required will be 87,757. However, pupils could get extra hours on the PC after working hours. This would bring down the pupil-computer ratio to about 40:1.

The Ministry has several strengths that should make this mission achievable. Firstly, the Ministry has a robust network linking all Provincial Education Offices to its headquarters as well as other education institutions such Examination Council of Zambia (ECZ), Education Broadcasting Services (EBS), Bursaries Committee and Curriculum Development Centre (CDC). Secondly, all the 14 Colleges of Education have ICT infrastructure connectivity and possess fairly standard hardware and software infrastructure. Thirdly, the Ministry has a consolidated ICT Policy, implementation Plan and ICT usage guidelines and has a complement of qualified staff to handle the ICT implementation plans. The main weaknesses include the current inadequate institutional structures to oversee the ICT management. There also exist lax ICT procurement procedures that often lead to the acquisition of inferior goods. Similarly, the Ministry's country-wide geographical coverage makes it difficult and expensive to effectively deploy ICT.

All provinces in Zambia have radio stations, and almost all households have at least one radio set. Interactive radio instruction (IRI) turns a typically one-way technology into a tool for active learning inside and outside the classroom. However, the IRI programme of the Educational Broadcasting Services (EBS) which was a platform that used low-cost technologies to deliver education to vulnerable children in both urban and rural areas was not extensively used.

Satellite television is currently not adequately utilised for educational purposes. Television and radio are widely available in households, despite not being used as an education tool in Zambia. Personal computers have also become essential tools for work and communication. Mobile phone companies currently cover about 88 percent of the population and provide data on all connections. Worldwide Interoperability for Microwave (WiMAX) also covers almost over 40 percent of the population while Internet Service Providers (ISPs) have increased coverage, speed and internet bandwidth. Cognizant of the technological trends, education systems are embracing the use of technology to enhance student learning and training, modernize administrative functions and engage the broader community with the concept of lifelong learning. However, not much has been done in Zambia to embrace ICT.

In line with the National ICT policy that was launched in 2007, the Ministry has developed an ICT policy and implementation plan for education, an ICT strategic vision and a Plan to address issues of access and

the use and development of ICT in the delivery of education and training. The Ministry has also invested resources in its Education Management Information System (EMIS), which is a comprehensive system that brings together people, processes, and technology to provide timely, cost-effective, and user-appropriate information to support educational management at all levels. However, the EMIS has faced a number of challenges ranging from high staff attrition to high internet connectivity costs that have made sustainability of the system quite difficult.

A number of positive initiatives have been undertaken in the field of ICT and the school environment. The iSchool project, for example, aims to empower Zambian school children, their parents, and communities through access to worldwide information and education. The Project Objective is to provide schools with sustainable internet connectivity, computers and learning materials that would help to improve the quality of education service delivery. Similarly, ESNNet (Education Support Network) supports eight schools in Lusaka, Copperbelt, Central and Southern provinces. The project aims at improving education in Zambia through equipping teachers with ICT skills and tools to digitally package hand-written materials or notes and sharing them on electronic platforms to be accessed by other teachers.

Other initiatives include the 'OER4Schools' pilot project which is currently underway and assesses the feasibility of providing Open Educational Resources (OER) to ICT and Internet-equipped Primary Schools in Zambia, and of supporting interactive forms of subject pedagogy with the new resources. The ENEDCO (Enhancing Educational Content) is a project with the aim of improving educational content through adding and enhancing illustrations, packaging the materials and making them available online and on multimedia devices. It also packages lab demonstrations on video to illustrate how certain experiments can be done. This is made available to schools without laboratory facilities. In the colleges of education, the Ministry has embraced ICTs and works with the EQUIP 2 Project that, inter alia, renovates some classrooms and convert them into ICT laboratories at the 14 colleges of education, the labs are networked and connected to the internet while VVOB, a Belgian NGO, has programmes with Colleges of Education developing open content and exploring use of social media to share information amongst lecturers.

Quality still remains a challenge in integrating ICTs in education. Despite efforts to embrace ICT in education, there is no institution in the country that trains ICT teachers or lecturers. Most of the teachers that teach ICT are makeshift as they have only done courses in ICT applications thereby making them ill qualified to teach ICT in schools and colleges of education. The situation has been exacerbated by the lack of a curriculum for computer related courses. Several other challenges that have to be addressed include the following:

- (a) High Internet Connectivity costs;
- (b) Low levels of ICT literacy in the population;
- (c) Unreliable power supply, especially in rural areas. As out of the 9,333 schools as at 2010, only 1,576 schools had electricity. In addition, there is very little investment in alternative sources of power like renewable energy, solar and even generators to institutions of learning;
- (d) Little investment in Electronic-learning (E-Learning);
- (e) Very little investment in digital content: Most teaching and learning materials are in print media which is very expensive in terms of production and circulation; and
- (f) Inadequate skilled manpower: There are few credible training institutions in ICT leading to low number of qualified manpower.

12.2 Main Policies, Objectives and Strategies

A sustained commitment to infrastructure development will be the main focus in the SNDP. It is the Ministry's policy to continue to invest in ICT related infrastructure. In this respect, the main ICT policy areas will be the following:

- (a) Facilitate the creation of Centres of Excellence for research in Electronics Engineering, Telecommunications, Computer Science/Information Technology, Media/Information Science and other Science and Technology-related fields;
- (b) Take appropriate policy measures to facilitate and promote the integration of ICTs within the entire education system to support administration, teaching, learning and research;
- (c) Adopt and adapt NEPAD E-Schools and other initiatives to promote E-learning and E-Education as well as life-long learning within the population at large;
- (d) Strengthen science and technical education as the basis for laying the foundation for human resource and skills development in ICT; and
- (e) Adequately invest in R&D as a way of developing the nation's scientific and industrial research capacity in ICTs.

The Ministry's ICT objectives are anchored on its quest to integrate ICTs in education in order to enhance ICT Literacy at all levels, provide educational and training services, meet the challenges in the changing educational, management and business needs of the Ministry and provide a platform for e-Governance services and synergies with other Ministries and the private sector. In light of the above, the following are the main ICT policy objectives in the area of education:

- (a) To deploy ICTs at all levels of the education system in order to improve and expand access to education, training and research facilities;
- (b) To equitably integrate ICTs into the educational delivery system with the aim of improving the quality of education and training at all levels; and
- (c) To strengthen the administration and decision-making capacity in the educational system through the deployment of Education Management Information Systems and use of ICTs.

The Ministry shall adopt the following strategies during NIF III:

- (a) Promote the development, deployment and utilisation of electronic-based distance education, training and learning systems in the Zambian educational system to complement and supplement residential education and training;
- (b) Implement special schemes and policy measures and packages aimed at promoting affordable acquisition of computers and other ICT products by students, trainers and educational institutions;
- (c) Promote and facilitate the integration of computer skills into the teaching and learning process at primary, secondary school and tertiary levels;
- (d) Introduce programmes on teacher education in ICTs at all training institutions in the country;
- (e) Develop a national ICT curriculum and qualification system at primary, secondary school and tertiary levels;
- (f) Promote and facilitate the development and the adoption of Educational Management Information Systems within the public and private educational institutions to improve the quality of managing educational delivery activities, operations and monitoring;
- (g) Promote and facilitate the adoption of educational technologies and Internet access within the public and private educational institutions targeting all learners at all levels of the educational system; and
- (h) Develop partnerships with private sector and other stakeholders in the quest for increased ICT literacy.

12.3 Planned Activities

Table 21 shows indicative activities under ICT during NIF III period:

Table 21: Planned Activities for ICT during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
1 To deploy ICTs at all levels of the Zambian educational system in order to improve and expand access to education, training and research facilities;	Promote the development, deployment and utilisation of electronic-based distance education, training and learning systems	Provide ICT Infrastructure (labs, equipment, software etc)	No of schools with minimum ICT infrastructure	Less than 4% of primary and secondary schools equipped with computers	10% of primary and secondary schools equipped with computers	Increased use of ICT for teaching	MESVT, MCT, other ICT stakeholders, the industry
	Implement special schemes and policy measures and packages aimed at promoting affordable acquisition of computers and other ICT products by students, trainers and educational institutions;	Develop an ICT acquisition framework	ICT acquisition framework	None	ICT acquisition framework in place and operational		
		Partner with relevant stakeholders for ICT equipment acquisition	MoU	None	MoUs Covering all beneficiary groups		
			No. of teachers, learners, education staff and administrators that have access to ICT	8,000 learners per computer No m/f data available	500 learners per computer total M= 250 F= 250		
	Improve access to materials through ICT	Establish e-library centres	Number of e-library centres established	None	9 provincial libraries and 12 resource centres	(a)	

Table 21: Planned Activities for ICT during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
2. To equitably integrate ICTs into the educational delivery system with the aim of improving the quality of education and training at all levels;	Promote and facilitate the integration of ICT into the teaching and learning process at primary, secondary school and tertiary levels	Develop a broad range of ICT education and training programmes	No. of ICT education and training programmes	1 ICT education and training programme	5 different ICT education and training programmes offered to students, staff and the community	Quality education services	MESVT. Industry, Community, Business institutions, TEVETA
		Develop materials and services for on-line education for LSEN	Materials and services for on-line education for LSEN	None	All subject areas covered		
			No. of teachers of LSEN, OVC and learners in disadvantaged areas that have ICT skills and access to infrastructure	Less than 200 teachers trained	5,000 teachers and lecturers trained		
	Introduce programmes on teacher education in ICTs at all training institutions in the	Train teachers, lecturers and other staff in ICT	Number of teachers and lecturers trained to use ICT	Less than 2000 trained	20,000 teachers and lecturers		

Table 21: Planned Activities for ICT during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	country;		Number of teachers and lecturers trained to teach ICT applications	None	1, 000		
			Number of teachers and lecturers trained to teach ICT (computer studies/science	None	80		
		Provide networks at provincial and district teachers resource centres	Number of networks available at provincial and district teachers resource centres	Provincial resource centres	All centres connected to the Ministry network		
	Harmonise the provision of ICT education	Review curriculum framework	Curriculum framework	2003 Curriculum framework	ICT incorporated into the Curriculum framework		
		Integrate ICT into curriculum	Curriculum	2003 curriculum	ICT integrated into the new curriculum		

Table 21: Planned Activities for ICT during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
3. To strengthen the administration, decision-making capacity (efficiency & effectiveness) in the educational system	Promote and facilitate the development and the adoption of EMIS in educational institutions.	Sensitise stakeholders on EMIS	Number of stakeholders sensitised	2 DDCC members from 5 provinces	All DDCC and PDCC members sensitised	An efficient and effective education system	MESVT and Private sector
		Train ministry staff in use of EMIS	Number of staff trained	Only staff at PEO and DEBS office	All Education Boards		
4. To promote collaboration	Develop partnerships with private sector and other stakeholders	Engage the private sector and other stakeholders in providing ICT education services	Number of private sector and stakeholders providing ICT services	No data	At least one per province		MESVT, Private sector

Infrastructure Development

13.1 Situational Analysis

The provision of appropriate and sufficient infrastructure facilities and services, including rehabilitation and maintenance, is important to safeguard the quality of education service delivery to all citizens. The aim is to improve equitable access to, and quality of education. Broadly, infrastructure development encompasses the construction, rehabilitation and maintenance of classrooms and other educational facilities, including specialised rooms, staff houses, toilets, provision of school furniture and equipment. It is acknowledged that the provision of these infrastructure services has not matched the fast growing school enrolment at all levels. Infrastructure challenges and needs of the various sub-sectors are presented below.

With regard to the Early Childhood Education Sub-Sector, the Ministry will encourage the establishment of Early Childhood programmes in its multi-dimensional development as well as the establishment of these programmes in rural and poor urban communities where such programmes are almost non-existent. The Ministry will provide standard infrastructure designs for both rural and urban ECE centres which could be used or modified to suit the needs of different stakeholders and differing geographical demands.

Concerning the Primary Education Sub-Sector, the vision of the Ministry as enshrined in its policy document, *Educating Our Future*, is to provide access to good quality and equitable 9 years of education to every child by the year 2015. In the last 10 years, the Government made concerted efforts towards the realisation of the vision by implementing various programmes, including the infrastructure development programme. From 1999 to 2002, under the Basic Education Sub-Sector Investment Programme (BESSIP), close to 5,000 classrooms were built and 800 classrooms were rehabilitated using both construction methods (i.e. Community and Contractor modes). This was in order to reduce the shortage of classrooms as well as the walking distances to schools thereby improve access to primary education, especially at lower primary level. In subsequent years under the National Implementation Framework I (2003 to 2006), 920 classrooms were built. Furthermore, the Ministry constructed 4,050 classrooms during 2008 and 2009 periods. However, the school sites where these classrooms were built did not have full complementary facilities like teachers' houses, ventilated improved pit latrines (VIP) and water points.

In 2010, there was no investment in infrastructure at Primary Education level despite the Ministry preparing the Infrastructure Operational Plans because funds were committed to the construction of secondary schools where the deficit was greater.

Based on the 2010 Education Statistical Bulletin, the total number of Primary School classrooms was 161,972 of which 22,567 were in permanent materials with the rest in mud and pole. The average enrolment growth rate for the primary school level over the last five years was 5.2 percent. With the 2010 enrolment of 2,956,821, it is thus projected that by 2015 the enrolment will be 3,809,814. In terms of classrooms, it implies that the Ministry will require a total of 95,245 permanent classrooms. This therefore, translates into a shortfall of 72,678 classrooms

based on single shift utilisation of classrooms. However, with double shifting at Grades 1-4, the shortfall is projected at 43,152 classrooms considering that over the last five years the trend has been that the Grade 1-4 enrolments constituted on average 62 percent of the total primary school enrolments. In view of the change in the education system, most of the 13,816 permanent classrooms being used by grades 8 and 9 in Basic Schools will be used by grades 1-7 as grades 8 and 9 are phased out from basic schools to secondary schools. Therefore, the Ministry needs to provide about 30,000 additional classrooms in order to enrol 100% of the primary school going population.

The government policy is to upgrade and convert Community Schools into fully-fledged primary schools. This will call for infrastructure development in Community Schools that are in pole and mud to bring them to habitable state. This will have to be attended to by the Ministry.

Regarding the Secondary Education Sub-Sector, there is evidence that the sector remained largely stagnant from mid-1970s to 2008. From 1975 to 2006, the only investment in infrastructure development was the construction of 6 secondary schools under the World Bank programme, 3 Secondary Schools under ADB Education I, 3 secondary schools under JICA and 1 secondary school under OPEC. 86 Secondary Schools were also rehabilitated between 1986 and 1990 using NORAD funds. Under the ADB Education II, construction of additional and rehabilitation of existing infrastructure was undertaken at the two national schools, namely, Hillcrest and David Kaunda Technical to facilitate the enrolment of girls as the two schools were exclusively for boys.

After 2008, the Ministry embarked on the construction of secondary schools country wide. This was in response to the large demand prompted by increased enrolments at the primary school level. In addition, the Ministry has been investing in furnishing existing secondary schools to address particularly the shortfall of desks and supply the same to newly constructed schools. In 2010 the furniture shortfall stood at approximately 800,000 desks.

Despite the stagnation in infrastructure development at Secondary School level, there has been a marked improvement in terms of access and participation since 2000 with an average annual enrolment growth rate of eight percent over the last five years up to 2010. One major reason for the increase was the conversion of a number of Basic Schools into High Schools. Consequently, in 2010 there were a total of 8,284 secondary school classrooms out of which 7,769 were permanent while the rest were either temporary or incomplete. Based on the total Grade 8 to 12 enrolment of 622,068 and the annual enrolment growth rate indicated above, it is projected that the enrolment will increase to 914,022 by 2015 requiring an additional 26,115 classrooms. Therefore the shortfall is projected at 18,946 classrooms. With the on-going construction of the 66 Secondary schools which will contribute an additional 792 classrooms, the shortfall will be 17,554.

Infrastructure development information, with respect to Colleges of Education, shows that between 2000 and 2003, all the 14 primary teacher training colleges were rehabilitated under BESSIP. However, the housing units were not included in the rehabilitation and have remained so since 1980. Under NIF II, 1x3 classroom blocks were constructed at the same colleges in order to increase output of primary school teachers. The two secondary teachers colleges, Nkrumah College and Copperbelt Secondary Teachers College of Education, were planned to be converted into university colleges, which called for the construction of additional infrastructure.

In terms of TEVET Institutions, infrastructure development has remained highly limited. In 2010,

there were 27 TEVET institutions, far short of national requirements. A total of 61 more TEVET institutions are needed by 2015 to meet the shortfall. Overall, the TEVET sub-sector faces progression challenges in certain programmes as there are no institutions that offer higher level qualifications. In order to partially address this challenge, the Ministry plans to merge the three Luanshya-based institutions into a Polytechnic that would offer higher level qualifications.

There has been no infrastructure development with regard to National Science Centres. The National Science Centre (NSC) was initially established in 1992 as a project under UNESCO to produce teaching and learning materials in Science Mathematics and Technology (SMT). Since its inception, the Centre has been operating under a makeshift arrangement with no proper buildings. It has three makeshift satellite centres, (Lusaka, Choma and Kasama). The Ministry plans to construct one modern National Science Centre in Lusaka and 10 provincial satellite centres; one in each province. The focus in the SNDP is, among others, the promotion of SMT education. To this effect, the role expected to be played by NSC becomes imperative.

Library Services infrastructure development has not been undertaken over the years despite the critical role of a library in the provision of education. A library is an indispensable resource which at the same time provides an environment for continued learning outside the classroom. There are currently six provincial libraries which are not well stocked and are without internet connectivity. At the same time, there are 18 district libraries of which seven are functioning and 11 are closed due to dilapidation and inadequate personnel. This poses a challenge on literacy level in the country as can be exhibited by low performance in the national assessment and SACMEQ results. The need therefore, to invest in the library services especially infrastructure is of utmost importance.

Infrastructure development involving Universities has remained cosmetic despite rising increase in the number of students enrolled as well as the number of programmes being run. Until recently, the provision of university education in Zambia has been government-dominated. Due to poor funding, there has been little physical expansion and renovation at these institutions. The University of Zambia was opened in 1966 and its infrastructure has remained largely inadequate and poorly maintained. The same is true of the Copperbelt University, which is another public university. Mulungushi University, which was opened in recent years, does not have adequate infrastructure too. In the latter (Mulungushi), Government has made some investment in the construction of hostels, dining hall, lecture theatres, lecture rooms, library and other facilities. Mulakupikwa College/University of Science, Mathematics and Technology is under the second phase of its construction. The first phase was the renovation of support houses. Similar infrastructure as for Mulungushi University is under construction.

It is the desire of the Government to convert four of the existing colleges, namely, Copperbelt Secondary Teachers College (COSETCO), Nkrumah, NISTCOL and Palabana into Universities. In addition to this, Lubwa and Mulakupikwa will be constructed as fully fledged Universities.

The three existing public universities need extra bed space as well as learning areas. Government will therefore, encourage the private sector to provide additional bed spaces while government resources will be targeted at the creation of other infrastructure.

13.2 Main Policies, Objectives and Strategies

During the NIFIII period, the Ministry will undertake infrastructure development. The focus of the Ministry is to provide accessible, equitable, quality and conducive learning environment.

In order to attain the above stated policies, the Ministry will focus on the following objectives:

- (a) To expand and improve education infrastructure through construction of new facilities and rehabilitation of existing ones;
- (b) To encourage cost sharing mechanisms for infrastructure development through Public Private Partnership;
- (c) To promote community participation at primary, secondary and tertiary level institutions in the development of infrastructure;
- (d) To provide safe learning environment for all learners by re-introducing boarding facilities including weekly boarding facilities;
- (e) To provide conducive learning environment by supplying furniture and equipment.

The Ministry envisages attaining these objectives through the implementation of the following strategies:

- (a) Explore cost effective innovations in infrastructure development without compromising quality;
- (b) Explore environmentally friendly designs that are in line with modern technological trends;
- (c) Expand and improve education infrastructure;
- (d) Procure and supply furniture to learning institutions;
- (e) Provide safe water and sanitary facilities;
- (f) Improve the capacity of key officers at all levels to effectively monitor infrastructure development.

13.3 Planned Activities

Table 22 shows the indicative activities under Infrastructure Development during the period 2011 to 2015:

Table 22: Planned Activities for Infrastructure Development during 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
1. To expand and improve education infrastructure through construction of new facilities and rehabilitation of existing ones.	Expand and improve education infrastructure.	Design model plans for ECE classrooms	Number of Model ECE Plan	No Model ECE plans	At least one model ECE plan available and utilized	Positive response from the school communities.	MESVTEE School Infrastructure Section(SIS)
		Construct classrooms using community mode for ECE Centres	Number of classrooms	None exist	6,000 classrooms		
		Construct classrooms using community mode for primary schools	Number of classrooms	51,235 classrooms in existence	10,000 classrooms		
		Construct teachers' houses under community mode at primary schools	number of teachers' houses	15,035 permanent staff houses	1,000 teachers' houses		
		Construct libraries in rural primary schools	number of libraries	Data not available	18 libraries in rural districts		
		Rehabilitate provincial libraries	number of libraries	9	9		
		Construct Junior Secondary Schools under contractor mode	Number of Schools	Data not available	90 Junior Secondary Schools		

Table 22: Planned Activities for Infrastructure Development during 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
		Complete the construction of Secondary schools	Number of Secondary Schools	44 Secondary Schools under construction	44 Secondary Schools completed		
		Construct weekly boarding Secondary School.	Number of weekly boarding facilities	No weekly boarding facilities	50 weekly boarding facilities		
		Construct additional Infrastructure at existing schools	Number of additional infrastructure	Data not available	2,000 classrooms		
		Construct secondary School Infrastructure using contractor mode	Number of classrooms/houses/laboratories	8,264 classrooms data not available for houses and laboratories	90 classrooms/houses/laboratories		
		Rehabilitate Secondary Schools using contractor mode	Number of secondary schools	8,264 secondary schools	300 secondary schools rehabilitated		
		construct Schools for Continuing Education	Number of Schools for Continuing Education	13	10 Schools for Continuing Education		
		rehabilitate schools for continuing education	Number of Schools for Continuing	13	13 schools for continuing education		

Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
			Education				
		Construct Colleges	Number of Colleges	13 Colleges	2 Colleges		
		Construct and equip New National Science Centre(HQ)	Number of National Science	Nil	1 National Science Centre		
		Construct and equip Science Satellite centres	Number of centres	9 Makeshift Satellite Centres	10 Satellite science centres		
		Construct and equip Zonal Resource Centres	Number of centres	Nil	50 Zonal centres		
		Construct public Universities	Number of public universities	3	4 public Universities		
		Renovate infrastructure at 2 public universities	Number of buildings	3	2 public Universities		
		Convert 4 colleges into Universities	Number of colleges	3	4 colleges		
	Procure and rehabilitate furniture to learning institutions	Procure single seater desks	Number of Single seater desks	nil	200,000 single seater desks		
		Procure double seater desks	number of double seater desks procured	453,517 desks in schools	500,000 double seater desks procured & supplied		
		Rehabilitate furniture frames	number of furniture frames	-Data not available	100,000 furniture frames		

Table 22: Planned Activities for Infrastructure Development during 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected Outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
	Provide safe water and sanitary facilities	Drill boreholes and equip with pumps	Number of boreholes	-3,518 borehole with pump 666 borehole piped	2,000 bores holes equipped with pumps		
		Construct pit latrines	Number of pit latrines.	-6,325	7,000 pit latrines		
			Pupil latrine ratio	Not yet included in the school census and EMIS	Included in school census and EMIS		

Institutional and Human Resource Framework

14.1 Situational Analysis

The Ministry needs an administrative structure that is appropriate to managing the diverse sub-sectors in their present size and that will promote their rational development in accordance with nationally adopted objectives. This implies a fundamental review of the roles of all units, sections and departments in the Ministry, with a view to clarifying, streamlining and, where appropriate, strengthening their functions, especially that there has been a merger of two Ministries, namely, Ministry of Education on the one hand and Ministry of Science, Technology and Vocational Training on the other hand. At the time of finalising this document, Cabinet Office was still in the process of developing a harmonised structure for the merged Ministry. Reasons for the merger of the two Ministries have already been outlined in the Strategic Focus chapter.

The Ministry recognises that, to effectively implement the SNDP through NIF III, considerable levels of management efficiency and effectiveness have to be developed. In the light of this, systemic restructuring and capacity strengthening of the merged Ministry shall be one of the main goals during the 2011-2015 NIF III period.

Management Improvement is an important aspect of the institutional and human resource framework. The Ministry recognises that there is need to review its structure in view of the emerging challenges brought about by the declining quality of education and the EFA, MDG and Vision 2030 quantitative targets for Zambia. The Government's decision to decentralise educational services management and provision also calls for structural reorientations at the Ministry headquarters and at the provincial and districts levels. The demand to broaden the partnerships in education and training further justifies the review of the organisational and management structure of the Ministry. New positions may have to be created in line with new demands. The review and strengthening of all the directorates in the Ministry, including on how best to absorb the TEVET and ECCDE components that the new Government has transferred to the Ministry, is urgent.

Evaluation of performance of staff through the Annual Performance Appraisal System (APAS) at all levels is part of an effective management structure. With new positions comes a renewed need to ensure performance is effectively evaluated and rewarded or sanctioned as needed. Improved management of staff at all levels is necessary for effective services provision and the newly structured ministry provides an opportunity to focus more attention on ensuring these systems function during the NIF III implementation period.

The Ministry is expected to facilitate the planning and marshalling of the resources needed for implementing the SNDP through NIF III. At present, the Ministry is not well positioned to provide, for example, accurate and up-to-date statistics on pupils, enrolment rates, dropout rates, teachers, educational materials etc, that are so vital for decision-making and policy reforms. In order to deal effectively with the foregoing, the Ministry needs to beef-up its staff compliment in

planning, budgeting, statistics, and information management. Presently, the flow of information from the Ministry to the beneficiaries and other stakeholders needs to be enhanced.

In the light of the above, the Government recognises that considerable level of management efficiency and effectiveness has to be developed and retained in a sustainable manner if the varied objectives of the SNDP/NIF III are to be realised.

In addressing the capacity needs of the Ministry, the focus will primarily be on the following:

- (a) Defining the departments/units' respective institutional functions and responsibilities;
- (b) Enhancing management, leadership and technical capacity among all personnel at all levels;
- (c) Defining the form and extent of interaction among all departments/units within the Ministry;
- (d) Ensuring effective implementation of APAS at all levels;
- (e) Strengthening capacity to collect, analyse and appropriately package information to support evidence-based decision making;
- (f) Strengthening capacity to collect, analyse and disseminate statistical information in a timely manner to all stakeholders;
- (g) Enhancing functional leadership and professional support to stakeholders;
- (h) Strengthening capacity in the Ministry to undertake research in key areas such as gender, HIV/AIDS, ICT and other emerging issues to support evidence-based policy formulation; and
- (i) Strengthening capacity to prudently use and manage financial resources at all levels.

Decentralisation, another aspect of the institutional and human resource framework, facilitates efficiency and effectiveness in service delivery. The Ministry Headquarters currently handles over 50 percent of expenditure, particularly as a result of the centralised spending on secondary school and tertiary level infrastructural activities. Only about 33 percent of the total non-Personal Emoluments (non-PE) spending goes through the District Education Board Secretaries' (DEBS) accounts. Operationally, the Ministry Headquarters still manages much of the implementation process. This is in contrast to the aspirations of Educating Our Future policy which states that the Ministry will decentralize and devolve power, authority and the relevant functions from national and provincial headquarters to the districts, colleges and schools. Furthermore, the policy assigns headquarters the functions of making legislation; formulating policies; planning at national level; resource mobilisation and allocation; developing the national curriculum; setting national standards; and monitoring and evaluation.

The Ministry is of the view that during NIF III implementation, decentralisation should constitute an important instrument in its systemic improvement effort. In this respect, the Ministry shall continue to strive to put in place an effective and efficient education delivery system that shall be founded on a decentralised mode of service delivery, targeting the untapped resources and skills at the lower levels in a manner that is inclusive and consultative. By 2015, educational service delivery should be fully managed and monitored by decentralised institutions with the Ministry Headquarters providing only technical support and guidance. Key among the skills required by the lower levels is the ability to collect and manage data. The Ministry has well established processes and systems for data collection and management at district and national levels such as the EMIS, IFMIS, and the Bursary Management system. The yearly Education Statistical Bulletin

(ESB) provides the details of the key indicators in the sector and tracks performance over time. However, of late there are challenges in producing the ESB in a timely manner.

The challenge, however, has been ensuring that lower levels own and contribute to the processes to achieve more robust and decentralised data management systems. Another challenge relates to the use of data for decision-making. Most of the lower level units use data other than that provided in the EMIS to make decisions.

Similarly, under the decentralised mode of educational service delivery, districts shall handle their respective funds covering local procurement of materials, maintenance of facilities, district-level capacity building, etc. In addition, more authority shall be extended to School committees in the fields of planning and expenditure management.

To empower lower level structures to assume added devolved responsibilities, the Ministry shall also address the improvement of the education management and leadership capacity of staff at the school and district levels. In particular, the Ministry shall target the improvement of knowledge and skills of lower level personnel including school managers in education in decision making, policy analysis, budgeting and expenditure control, education strategic planning and implementation, supervision, human relations, and data collection, analysis and utilisation.

Budgeting and Financial Management Improvement also constitute critical aspects of the institutional and human resource framework. Considering that the Ministry's strategic objective is to improve service delivery through, inter alia, the enhancement of administrative and support services, Budgeting and Financial Management Improvement. Specifically, the Ministry's objective will be achieved through the provision of timely and accurate financial information to all relevant stakeholders. (MOF, CPs, Auditor General etc). Arising from the concerns around financial management and procurement, during NIF II, CPs and government jointly agreed on a financial management action plan (FMAP) which was aimed at strengthening the ministry's financial management and procurement capacity. The implementation of the FMAP is ongoing and will be completed during the NIF III period. In the longer term, these measures will be incorporated into the government existing public financial management processes.

During the NIF III period and as the sector operationalises the SNDP, the Ministry shall focus on the following strategies:

- (a) Improvement of capacity of the Ministry's Planning Directorate, Procurement, Accounts and Audit units;
- (b) Improvement of the payment and procurement system of the Ministry;
- (c) Strengthening of the Ministry's construction and maintenance capacity; and
- (d) Development of a training plan that shall be responsive to the priorities of the sector as reflected in this Document (NIF III).

To achieve the above, it is Government policy, guided by the country's Aid Policy and Strategy, to progressively integrate external resources into its budgets. This calls for an effort on the part of the Ministry to align the timing of donor pledges to its budget cycle. It also means that the need to progressively merge the current parallel financial management structure that, though under the pool funding modality, still separates government resources from externally-derived ones. This will allow all resources to be better streamlined into the Ministry's planning, budgeting and resource accountability system.

In line with the *accounting* functions, the overall financial accountability system of the Ministry shall be enhanced through the implementation of an effective public expenditure management system. In this regard, the Ministry will ensure that submissions of its financial accounts to Parliament are made timely in order to allow the Legislature to take timely actions.

With respect to *audit* functions, the Ministry shall, as the first step, impress on Ministry of Finance and National Planning to review all the existing enabling pieces of legislation to ensure that audits in the Ministry are handled and completed in a transparent, credible and efficient manner. The Ministry shall also set clear formal rules, in liaison with the Office of the Auditor General, which would ensure qualitative and timely responses to audit queries. To perform the audit functions adequately, the Ministry will target its auditing capacity deficits at all levels of delivery with a view to putting in place comprehensive manuals in the areas of financial audit, control audit, performance audit and special investigations.

Procurement is another aspect of institutional and human resource framework. The main objective under Procurement is to develop, revise and improve the overall framework for quality educational procurement. This will ensure that the acquisition of goods, works and services balances the need for effectiveness of supply with efficiency of delivery to meet user needs, while maintaining transparency and achieving value for money. The Ministry will also standardise procurement processes, procedures and methods. Taking into account these important considerations, the Ministry will:

- (a) put in place capacity building programmes for the consolidation of its procurement system;
- (b) provide supportive infrastructure, particularly an enhanced electronic database that would capture key procurement information; and
- (c) progressively decentralise its procurement functions to the lower levels.

Another aspect of institutional and human resource framework relates to Management and Human Resource Capacity Strengthening. In this regard, human resource capacity building and retention shall be at the centre of the Ministry's interventions during the NIF III period. The Ministry, under its Human Resource component, shall aim to develop, revise and improve the overall framework for quality human resource management and administration of education delivery. At this level, the Ministry will continue to focus on ensuring that it recruits, retains and upgrades the performance levels of its employees through a variety of approaches. More specifically, the following capacity enhancement interventions are envisaged during the NIF III period:

- (a) *Senior and Middle Management*: Strengthen the management capacity of senior and middle management through the provision of short- and long-term training in procurement procedures, financial management, strategic planning and management, policy development and monitoring and evaluation.
- (b) *School Management*: Address the inadequacies of school heads in education management skills by exposing them to skills and knowledge that can improve their capacity for innovation, imagination and creativity in handling problems related to policy, planning and management of education at the local level. Other school-level officers are also going to be exposed to special training programmes.
- (c) *Gender in Management Positions*: Address the gender imbalance in management positions by putting in place targeted capacity building for female teachers and education staff; and

- (d) *Training Plan*: Develop a training plan that shall be responsive to the priorities of the sector as reflected in this Document (NIF III).

14.2 Main Policies, Objectives and Strategies

The main objectives of the Ministry in the area of institutional management are as follows:

- (a) To improve efficiency and effectiveness in the Ministry;
- (b) To design a strategy for external and internal resource mobilisation;
- (c) To develop and/or strengthen monitoring and evaluation systems; and
- (d) To strengthen stakeholder partnerships.

In order to achieve the above stated objectives, the Ministry will implement the following strategies:

- (a) Restructuring and decentralising of the Ministry;
- (b) Strengthening the capacity of staff in the Ministry;
- (c) Improvement of school Management;
- (d) Review the modalities of resource inflow into the education sector;
- (e) Strengthening M&E system of the Ministry; and
- (f) Establish an effective stakeholder network.

14.3 Planned Activities

Table 23 shows the indicative activities under the Institutional and Human Resource Framework during the 2011-2015 period:

Table 23: Planned Activities for Institutional and Human resource Framework 2011-2015 Period

Objective	Strategies	Key Activities	Performance Indicators			Expected Outcome	Core Implementer
			Indicators	Baseline (2009)	Target (2015)		
1. To improve the efficiency and effectiveness in the Ministry	Restructuring and decentralising of the Ministry	Lobby Cabinet Office to establish a Task Team to review the structure of the Ministry	Number Task Team	2002 structure	3 Task Teams	Strengthened education sector	Cabinet Office MESVTEE
		Draw up an implementation framework for restructuring	An implementation framework	No framework	Implementation Framework drawn	Power devolved closer to points of education service delivery	
		Restructure the Ministry	Structure of Ministry	2002 structure	Restructured Ministry	Effective & efficient service delivery	
	Build management capacities	Facilitate the undertaking of short- and long-term training	Number of officers trained	Data currently not available	10% of officers in each district trained	Effective and efficient service delivery	
		Develop/ implement Training Plan	Training Plan	2010 Training Plan	Annual Training Plans developed and utilised		

	Improvement of school Management	Conduct Education Leadership Management training for school managers.	Number of school managers trained	Data currently not available	School managers in 50% of Schools attend a Leadership Management Training after promotion	Effective and efficient school management
2. To design a strategy for internal and external resource mobilisation	Review the modalities of resource inflow into the education sector	Mobilise & align resources to the Aid Policy and Strategy for Zambia and JASZ	Annual Work Plans and Budgets	Ministry AWPBs & ABB aligned to NIF II	Ministry AWPB & ABB aligned to NIF III, SNDP & Govt aspirations	Smooth operation of the Ministry
		Improve function of DIFMIS	% of districts with timely reporting through DIFMIS	Nil	All districts	
3. To develop and/or strengthen monitoring and evaluation systems	develop and/or strengthen M&E systems	Review the M & E system	M & E system	2009 M & E system	Reviewed M & E System	Smooth operation of the Ministry
4. To strengthen stakeholder partnerships	Establish an effective stakeholder network	Conduct an audit of stakeholders to facilitate setting up a network of education service providers	Minutes of Consultative meetings	None	2 meetings annually	Increased access and enhance efficiency in education sector
		Enhance PPP in education service provision	# of institutions partnering in service delivery	No data currently available	At least one per district	

Implementation and M&E Framework

15.1 Situational Analysis

The Ministry is responsible for the implementation of the education and skills development chapter of the SNDP. In light of this, NIF III will serve as the primary tool to operationalise SNDP at all levels of the Ministry. NIF III will also serve as an important instrument for monitoring implementation performance with emphasis on outcomes and impact and, therefore, providing a framework for tracking resource allocation and utilisation.

NIF III *Implementation and M&E Framework* shall be guided by the Plan's stated broad output targets; performance indicators; means of verifying achievements; and the main implementers. The performance indicators given under each sub-sector in this NIF are useful for measuring outputs and form the basis upon which the impact/outcome assessment will be done using the Performance Assessment Framework (PAF).

The Annual Work Plans shall guide actual implementation and shall be prepared at the operational and functional levels. All the activities shall be implemented annually and shall focus on the realisation of one or more of NIF III five strategic outputs, namely, access, equity, quality, efficiency and relevance. As a general guide, *Annual Work Plans* shall give the following details:

- (a) Sub Sector objectives and targets;
- (b) Programme and its strategic objective(s);
- (c) Main activities covering the Strategic Plan year;
- (d) Sub activities, giving the given year's activities to be identified by each level of implementation;
- (e) Budget (giving source: GRZ, pool/donor and /or other source);
- (f) Timeline for the specific year;
- (g) Annual Targets; and
- (h) Implementation modality.

At the more practical level, the actual programme management and implementation of the SNDP through NIF III will be the responsibility of the regular management and administrative structures throughout the operational levels of the Ministry. The structures at the Ministry headquarters that are strategic during the NIF III period include the *Top Management Team*, which is the highest decision making organ of the Ministry; the *Senior Management Implementation Team* (SMIT) that shall oversee all programme implementation and facilitate the monitoring of the various Ministry programmes; and *Technical Committees* that will backstop the implementation of the set activities in NIF III.

At the provincial level, the Provincial Education Coordinating Committee (PECC) and the Provincial Education Management Committee (PEMC) shall ensure that the stipulated education policies and programmes under NIF III are implemented at this level. The role of the PECC will include making sure that sector programmes and activities are well implemented. They will also offer oversight functions over the other education providers so that they work within the existing priorities of the Government as defined in NIF III and other relevant strategy documents. At the district level, the District Education Coordinating Committee (DECC) will be responsible for

coordinating and implementing the SNDP through NIF III. The District Education Management committee (DEMC) will, in particular, ensure that all annually-approved activities at the district level are in conformity with the set priorities and targets. **Box 2** presents the committees that would be instrumental during the implementation of the SNDP through NIF III.

Box 2: Joint Structures for the Implementation of the SNDP

Joint Steering Committee (JSC) or Sector Advisory Group (SAG): This is a decision-making and advisory body, which takes decisions and/or makes recommendations to the Ministry. Management in the areas of policy, implementation and financing of the education sector programmes. The main tasks of JSC during SNDP implementation will include ensuring the achievement of overall sector programme objectives and providing an appropriate policy framework for the education sector. In this regard, its main tasks will include monitoring sector performance against the established indicators and review progress on alignment to key national reform policy and processes. JSC will also play a major role in the identification and approval of financing requirements; and in approving key policy and implementation framework documents within the Ministry.

Policy and Implementation Technical Committee (PITC): The PITC is an advisory body which will make recommendations to the Senior Management Implementation Team in the areas of policy and implementation of the SNDP sector programmes. The Committee's main tasks include provision of advice on government policies related to the education sector; and ensuring effective implementation of the sector programmes as defined in the SNDP and subsequent Annual Work Plans and Budgets.

Procurement Technical Committee (PTC): The main tasks of the PTC are:

- (a) Monitoring of procurement elements of the AWPB
- (b) Monitoring implementation of the annual procurement plan

Financial Technical Committee (FTC): The FTC is an advisory body chaired by the Chief Accountant with members drawn from relevant departments of Ministry with representatives from the 4 CPs, which makes recommendations to the FMT in the areas of financial management. The main tasks of the FTC will include:

- (a) Review and endorse Quarterly Technical and Financial Reports in liaison with PITC
- (b) Monitoring of the harmonization and strengthening of the Ministry Financial Management, Reporting and Audit systems at all levels

Sector Advisory Group (SAG): This Committee will play a supervisory and monitoring role.

In terms of Implementation Priorities, in implementing the SNDP through NIF III, the Ministry shall target five strategic outputs and all interventions shall use these as the primary reference points towards the attainment of the sector's goal. These are (a) Access (b) Equity; (c) Quality; (d) Efficiency; and (e) Relevance.

In the light of the above priorities, resource allocation prioritisation during the SNDP period shall be guided by the EFA principle that takes basic education as a human right. In this regard, the attainment of Universal Primary Education (UPE) including the implementation of the Early Childhood Education shall constitute the top-most priority, beginning with access to quality Free Primary Education.

As a preparatory process towards this ideal, the school curriculum shall be enriched with technical and vocational subjects that would better prepare the graduates for the world of work and productivity. The strengthening of comprehension of mathematics and sciences, to the extent that these are essential for enhanced technical orientation of primary and secondary school graduates shall be given priority. The role of other stakeholders, particularly the private sector, NGOs, FBO, CBO, etc., in educational service provision shall be vigorously pursued for both the improvement of the relevance of the school system and the need to harness available resources in the uplifting of educational service delivery. Private universities shall be encouraged to supplement government efforts at the tertiary education level. The Ministry shall therefore ensure that proper oversight mechanisms are developed and operationalised effectively to ensure that the

quality of tertiary education offered by private colleges and universities meet the minimum standards.

Monitoring, Reporting and Evaluation remain the major aspects of the Implementation and M&E Framework. Effective reporting and monitoring of the activities of a strategic plan are critical functions of delivery. These processes provide essential data and insights for drawing lessons, priority setting and forward planning, as well as offer the assurance that funds are used for agreed purposes. The Ministry shall therefore, work towards strengthening the reporting and monitoring systems in a way that would allow it to fully capture the total public expenditure for the education sector whether Government or donor-funded. To expedite this process, the Ministry shall work towards ensuring that lower-level organs submit their expenditures and revenue reports on time through use of computer-based automated recording.

This Implementation Framework shall remain the reference point for monitoring the performance of the Education and Skills sector. Consequently, the following tenets shall guide action:

- (a) In monitoring education sector performance, the Ministry and Cooperating Partners shall use the performance indicators that are included in this Implementation Framework. This shall entail the tracking of changes in the overall sectoral performance, focusing on outcomes and impact. Where there is genuine need for the introduction of additional monitoring and/or accountability indicators, these shall be added only with the approval of the Ministry;
- (b) A common monitoring framework (Education sector PAF) shall be agreed upon between the Ministry and all major stakeholders, including the country's Cooperating Partners, and the performance indicators shall always be kept simple, specific, measurable, time-bound, achievable, realistic, and easily verifiable;
- (c) The Ministry will ensure that sub-sector reporting and monitoring requirements under this Strategic Plan feed into the National Development Plan's overall reporting and monitoring system and that their timing is synchronised with key planning cycles, including the Ministry's budget process and the Implementation Framework's annual progress reviews;
- (d) Cooperating Partners shall rely on the Government's financial reporting and monitoring system;
- (e) The monitoring and reporting functions of all the education sub-sectors shall be reviewed to heighten their profile in the Ministry and to align them better with EFA goals and MDGs so that M&E system can more effectively screen the impact/outcomes (not just outputs) of the interventions in the education sector. Impact monitoring system shall be strengthened, focusing on the following:
 - (i) the improvement of relevant data collection;
 - (ii) the timeliness and quality of processing, analysis and publication/dissemination; and
 - (iii) The utilisation of impact monitoring results in policy-making and resource allocation.

It is worth stating that, since 2009, the Ministry strengthened M&E and mainstreamed it into the Annual Work Plans and Budgets and has adopted evidence-based decision making. The Ministry has also developed an M&E Framework that guides all M&E activities at all levels. As a way of mainstreaming M&E and improving evidence based decision making at district level, the Ministry developed district profiles meant to document problems and interventions in the sector at district level.

- (a) The reporting and monitoring communication infrastructure (both hardware and software) shall continue to be strengthened through the adoption and adaptation of ICT technologies;
- (b) At the more practical level, the monitoring processes shall use, as the main point of reference, the parameters set out in the *Annual Work Plans and Budgets* that shall operationalise NIF III activities. The regular meetings of the top and middle management staff of the Ministry will secure the monitoring of planned activities on a day-to-day basis. Monitoring will also be carried out as one of the main functions of the District Education Offices and respective managements and boards at the school/learning institution levels. Each monitoring body shall produce semi-annual reports that will include details of progress, financial expenditure profiles and actions to be taken forward. The reports will form the basis of the Ministry's Annual Reports on the NIF that shall be shared with all other stakeholders. The results of each Annual Work Plan will be reflected in the Ministry's Annual Reports and the overall progress will be tracked against the objectives, indicators and targets as set in NIF III;
- (c) A Joint Annual Review shall be undertaken to assess previous year's performance and also form a basis for the planning and budgeting process of the following year; and
- (d) A Mid-Term review of NIF III shall be carried out. This evaluation will include an impact assessment of the main activities of NIF III, set against the Ministry's overall goals and sub-sector goals and objectives within the NIF III timeframe.

15.2 Main Policies, Objectives and Strategies

The Ministry has a Monitoring and Evaluation system which shall be the official reference guide for all monitoring and evaluation activities. The ministry shall ensure that the ESB as the main instrument for sharing education sector statistics is disseminated in a timely manner for the current year. The Ministry shall work towards strengthening the reporting and monitoring systems in a way that would allow it to fully capture the total public expenditure for the education sector whether or not donor-funded. To expedite this process, the Ministry shall work towards ensuring that lower-level organs submit their expenditures and revenue reports in time. In order to improve upon the monitoring and reporting functions during the NIF III period, the following shall constitute the Ministry objectives:

- (a) To utilise EMIS data and research to help identify key issues to inform the Ministry's strategic planning and policy development
- (b) To highlight national trends in various aspects of education and consider how Zambia compares with other countries in education and skills development
- (c) To provide a system-wide assessment of key aspects of the education system and of education outcomes that can be monitored over time.

15.3 Planned Activities

Table 24 shows the indicative activities under the Implementation and M&E Framework during the 2011-2015 periods:

Table 24: Planned Activities for Implementation and M & E Framework during the 2011-2015 Period

Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	2009 Baseline	2015 (Target)		
1. To provide evidence to inform the Ministry's strategic planning, policy formulation, research and development processes.	Use the NIF III, the PAF and, the parameters set out in the AWPB	Develop the PAF aligning it to the NIF III and AWPB	New PAF	2007 PAF	New PAF	As the reference points for monitoring and evaluating the performance of the education sector.	MESVTEE CPs CSOs MoFNP
	Ensure that the Ministry sub-sector reporting and monitoring requirements under the NIF III feed into the SNDP.	Develop M&E reporting requirements aligned to SNDP	M&E reporting instrument	FNDP M&E reporting instrument	New M&E reporting instrument for SNDP		
	Enhance the Ministry's EMIS at Provincial, District and School levels	Training of appropriate staff	Number of officers trained	8 SPOs, 62 district planning officers	5 officers per province; 5 officers per district		
		Develop and disseminate the ESB each year	ESB completed & disseminated within 3 months of data collection	ESB 2010 disseminated to all stakeholders	5 years of ESBs completed and disseminated		
	Promote informed decision making at all levels	Conduct researches in various fields	Research reports	2010 research symposium	2 researches per year		
		Improve function of DeFMIS	% of districts with timely reporting on DeFMIS	Nil	All districts		
	Strengthen the monitoring and evaluation capacity in the ministry especially in the Directorate of Planning and Information	Train officers in the Planning Directorate	Number of officers trained	6 SPOs	All planning directorate staff members at HQ, in provinces and districts		

Table 24: Planned Activities for Implementation and M & E Framework during the 2011-2015 Period							
Objectives	Strategies	Key Activities	Performance Indicators			Expected outcome	Core Implementers
			Indicator	2009 Baseline	2015 (Target)		
2. To highlight national trends in various aspects of education and consider how Zambia compares with other countries in education and skills development	Review and heighten the profile of monitoring and reporting functions of all the education sub-sectors and align them with treaties signed	Mainstream M&E in all sub sectors	M&E framework	M&E not mainstreamed	Mainstreamed M&E	so that M&E system can more effectively screen the Government's interventions in the education sector.	
		Link Ministry M&E system to MoFNP M&E system	Ministry and MoFNP M&E systems	Ministry and MoFNP M&E systems not linked	Link Ministry M&E and MoFNP		
3. To provide a system-wide assessment of key aspects of the education system and of education outcomes that can be monitored over time	Form M&E technical committees at all levels of education provision	Establish M&E technical committees	M&E technical committee	None	M&E technical committees at all levels		

Financing of NIF III, Funding Modalities and Assumptions

16.1 Introduction

The financing for the implementation of the NIF III is a mixture of financing mechanisms. During the NIF III period, Education will be financed largely through three funding modalities: projects, pooled funds and some form of budget support. This will be through partnerships of government, CPs and the private sector. Additionally, Public Private Partnerships (PPP) for infrastructure programmes shall be encouraged. In addition the sector is also partially funded through civil society organisations.

A financing model has been used to make projections of the revenue and expenditures over the period of the NIF III and a funding gap has been identified. This chapter includes three scenarios; high, medium and base case scenarios.

The calculations for the scenarios are based on the key policy targets for the education sector as described in this document, as well as the achievement of the key activities and their associated indicators that have been detailed in each of the sub-sector chapters of the NIF III. The inclusion of three scenarios allows for better understanding of the full costs for funding the education sector from early childhood to tertiary education.

The high case scenario incorporates all of the policy aspirations included within the PF manifesto and, with the current level of funding projections shows a funding gap of K 10.262 Trillion (US \$2,061 Billion).

The medium case scenario uses realistic estimates for both funding requirements and expected revenue and expenditure over the period; maintaining a high level of aspiration for service delivery implementation across the sectors.

The base case scenario has also taken the policy aims into account, and further acknowledges the financial and capacity constraints to fully deliver on all policy aspirations. Therefore, lower targets have been set to take into account the financial resource envelope while still maintaining a solid base from which the policy objectives over the longer term will be reached. Using the base case scenario, the projected resource envelope is K 31,980 Billion (US\$6,396 Million) and the projected financing needs which include personal emoluments, non-PE recurrent costs, such as capitation grants, etc. and capital expenditure total K 33,172 Billion (US\$6,634.4 Million). This creates a funding gap of K 1,191 Billion or (US \$238 Million). The Government will work with partners to explore ways of filling the financing gap. Those include, among others, CPs, the

Global Partnership for Education (GPE) and lobbying the treasury to increase the budgetary allocation to the sector.

16.2 Strategic Focus

16.2.1 ECE

Funding for Early Childhood Education has not been part of the mandate of the Ministry until 2004, and the ECE policy is under development and yet to be finalised. The NIF III will implement activities in ECE during the period with key targets and indicators being set as shown in Chapter three. It will be funded through a combination of direct government funding, cooperating partners and the private sector. Funding for the ECE sub-sector will focus on increasing access.

16.2.2 Primary and Secondary Education

In the Ministry, general education comprises: ECE (3-6 years), Primary Sector (Grades 1-7), Junior Secondary (Grades 8-9), Senior Secondary (Grades 10-12) and teacher education. During NIF II, the increase in the educational budget enabled the Ministry to invest more in teachers and classroom which resulted in improved pupil-teacher, pupils-classroom and pupil-book ratios although these improvements were modest. In this light, the NIF III will pick up from where NIF II left at the level of performance targets and policy assumptions. In the NIF II, general education was funded through Government grants through Sector Wide Approach (SWAp), general budget support and user fees. Among the instruments that were used to finance general education was the memorandum of understanding between government and the cooperating partners.

During the implementation of NIF II, the education sector in Zambia made tremendous progress in improving access at Primary Sub-Sector as emphasis was on the expansion of Primary Sub-Sector at the expense of Secondary Sub-Sector. Among other reasons that led to focusing more resources on Primary Sub-Sector was to conform to the implementation of the policy decisions such as the fee-free primary and striving toward the achievement of EFA and MDG goals by the year 2015. This positive evolution was set within a comprehensive policy framework and the very structured government coordination mechanism with the CPs. It is also remarkable to note that the improvements in the education sector did not only take place at expanding primary sub-sector but also in the context of Public Finance Management (PFM) and accountability in Zambia.

However, learning outcomes have been stagnant. There remains a requirement to ensure effective literacy and numeracy at early grades for youth to receive adequate training to support the needs of the labour market. For that reason, quality improvement at primary level remains important. Funding for the primary sub-sector will focus on improving the quality of service delivery, as access has largely been attained.

In addition, support to secondary education needs to have a stronger focus as the Secondary School Sub-Sector has been neglected from as far back as the mid-1970s. Even though Secondary Sub-Sector received substantial allocation for infrastructure development toward the end of NIF II, there still remained a big deficit in terms of access. This led to a lot of primary school graduates failing to transit to secondary level because of limited space, hence creating bottlenecks within the system. Funding for the Secondary Sub-Sector will focus on capital expenditures. Therefore, during the period of NIF III implementation, 76 percent of total capital expenditure will be in the Secondary Sub-Sector; leaving the remainder of capital expenditure at 1 percent for

teacher training, university 4 percent, Science, Technology and Innovation 14 percent and Primary 5percent.

16.2.3 TEVET

Funding Technical Education and Vocational Entrepreneurship Training (TEVET) has remained a challenge. Although funding from the treasury has grown over the period 2006-2010 during FNDP, TEVET financing remained highly dependent on donors especially for infrastructure development and for sustaining the operations of Technical Education and Vocational Entrepreneurship Training Authority (TEVETA). Government allocation to TEVET increased significantly between 2004 and 2007, rising by more than 200 percent in 2008. Government-owned TEVET institutions are financed through annual grants, bursary scheme, the TEVET Fund (i.e. on a competitive basis), and fees paid by students. Training institutions are also dependent on student fees for their operations. Fees for public institutions providing TEVET are regulated by the responsible ministries while private providers of TEVET determine their own fees.

During the NIF III period, the current Government policy towards financing training will continue to be that of cost-sharing through Government, appropriations by Parliament and strengthening the implementation of the TEVET Financing Strategy, Co-operating Partners, the Private Sector, user fees charged by training institutions and a training levy.

The Government will implement a new strategy for financing TEVET institutions. Under this financing strategy, the focus will, therefore, be based on providing support to vulnerable learners training in skills that the Government considers as priorities. It is expected that, for programmes that are not considered priority by Government, public training institutions will be at liberty to charge economic fees to students wishing to pursue such studies.

16.2.4 Teacher Education

The funding for teacher training during the implementation of the NIF III will focus on improving quality of service delivery, which will be through public Teacher training colleges and school based CPD. During the NIF III period, the funding will be through a combination of direct government funding, user fees from distance learning students, CPs and the private sector.

16.2.5 Universities

Funding for universities has seen an increase during the implementation of NIF II. The focus will be on capital expenditure with the expansion of existing universities, establishment of new universities, as well as quality improvements. During the NIF III period, the funding will be through a combination of direct government funding, user fees charged by universities, cooperating partners and the private sector.

16.3 Financing Projections

A simulation model was used to estimate the total resources required to reach major sector targets by 2015. The targets and assumptions are summarised in Table 25. These targets do not exactly correspond to the key policy targets, as has been clarified in Chapter 2. The projections here are focused on realistic achievement of those targets over the NIF III period. The Table shows the main targets and parameters that lie behind the resource projections in each sub-sector.

The year 2010 has been used as the baseline year for the purpose of projecting the required resources while 2015 has been picked as the target year as this is the implementation period for NIF III. The Infrastructure Programme estimates have been included in capital expenditure

resource projections in Table 28. It should be noted that the total resource envelope which is an illustration of all resources that are expected under the ministry is outlined in Table 29.

Table 25: Main Targets and Parameters for Sector Development Projections for NIF III

Assumptions/Parameters	Baseline 2011	NIF III Targets (by 2015)		
		Base-case	Medium-Case	High Case
Primary School (grade 1-7)				
1. Completion Rate	90.7%	85.2%	85.2%	85.2%
2. Repetition Rate at Grade 7	9.8%	8.0%	8.0%	8.0%
3. Enrolment in Community Schools	16%	10%	10%	5%
4. Pupil-Teacher Ratio	51-1	47-1	45-1	40-1
Junior Secondary School Level (Grades 8-9)				
1. Enrolment Rate	tbc	65.0%	71.0%	71.0%
2. Transition Rate from Grade 7 to Grade 8	64.0%	75.0%	90.0%	90.0%
3. Pupil-Teacher Ratio	35-1	35-1	35-1	35-1
Senior Secondary School Level (Grades 10-12)				
1. Enrolment Rate	30.0%	43.0%	45.0%	52.0%
2. Transition Rate from grade 9 to 10	53.0%	60.0%	65.0%	90.0%
3. Pupil-Teacher Ratio	29-1	35-1	35-1	35-1

16.4 Resource Requirement Projections

The total resources required to reach major sector targets have been estimated up to 2015. The cost projections have been formulated for each sub-sector and take into account projected sub-sector enrolments, teacher requirements and the recurrent costs of running a particular sub-sector. The total amount required for the 2011-2015 period is shown in Table 26. Figure 5 graphically reveals the relative allocative weights of the different sub-sectors while Figure 6 shows the percentage shares.

Table 26: Summary of Total Required resources by Sub-Sector, 2011-2015

Sub-Sector	(K billion)					Total	% share	US\$m
	2011	2012	2013	2014	2015			
Early Childhood Education	4	5	6	4	6	25	0.1%	5
Primary School Education	2,227	2,749	3,087	3,457	3,866	15,387	46.4%	3,077
Secondary School Education	1,774	2,160	2,468	2,657	3,030	12,089	36.4%	2,418
Tertiary Education: Teacher Training	33	36	39	42	46	196	0.6%	39
Tertiary Education: University	290	313	330	356	385	1,674	5.0%	335
Management and Administration	486	523	562	604	650	2,824	8.5%	565
Science and Vocational Training	141	184	201	217	233	976	2.9%	195
Total Required Resources	4,956	5,970	6,692	7,338	8,215	33,172		6,634

Figure 5: Total required resources by Sub Sector

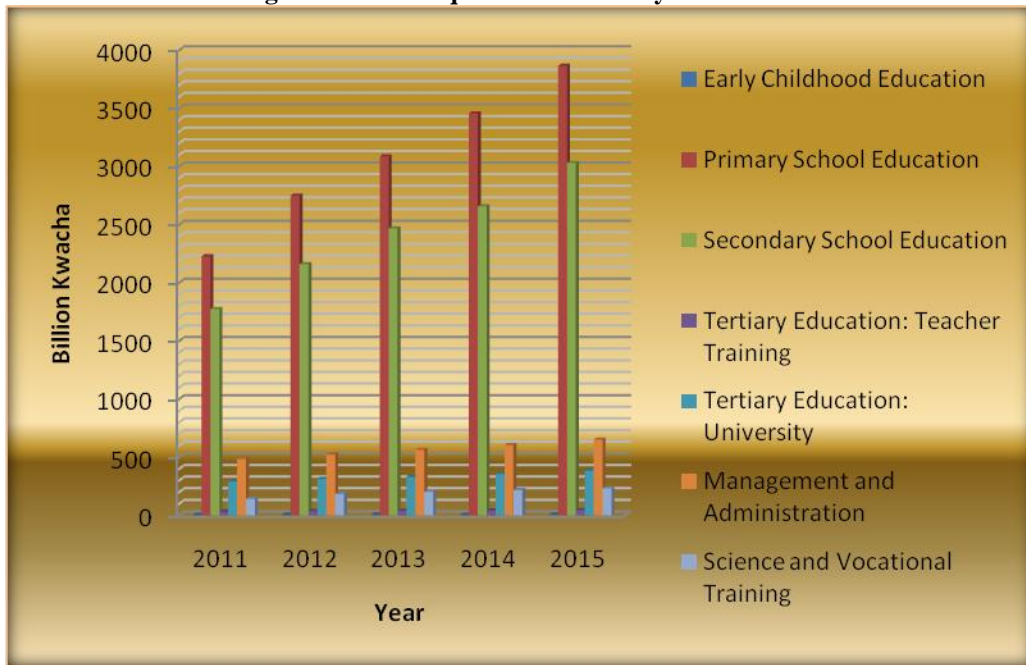
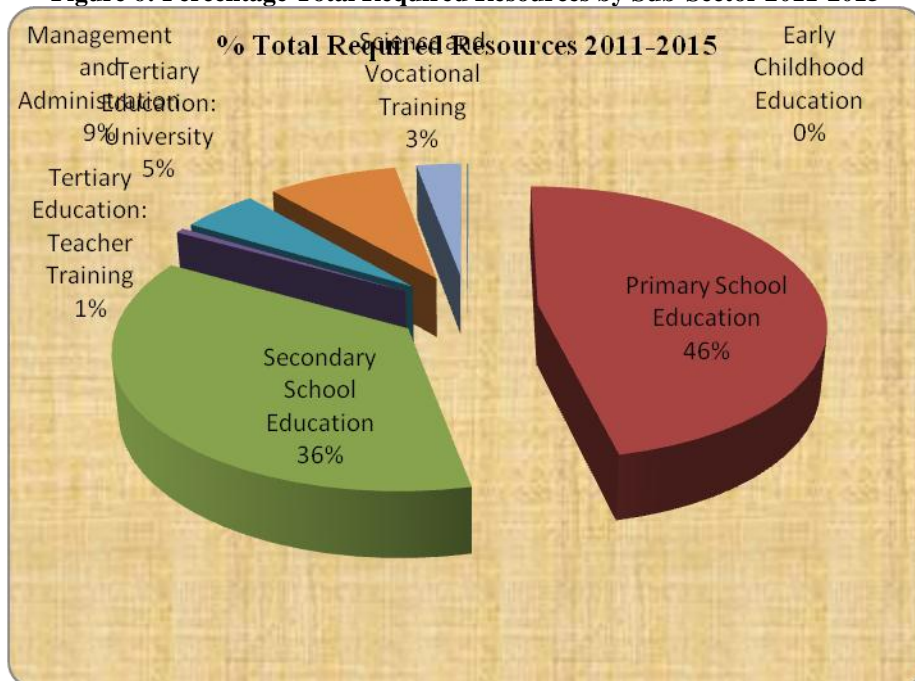


Figure 6: Percentage Total Required Resources by Sub-Sector 2011-2015



16.5 Required Recurrent Expenditure Resources

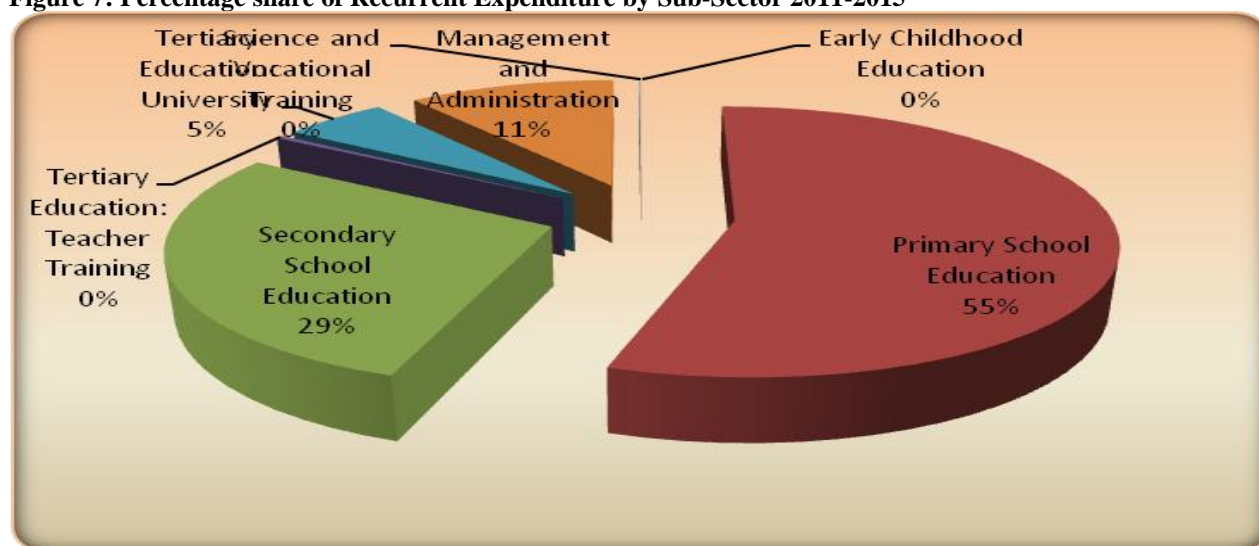
The total required recurrent expenditure resources for the education sector during the NIF III period is estimated at K27.9 trillion (Table 27). The non-PE budget shares have been doubled from the FNDP levels in order to cater for programmes that improve quality.

Table 27: Required Recurrent Expenditure Resources

(K billion)								
	2011	2012	2013	2014	2015	Total	% Share	US\$m
Early Childhood Education	2	3	3	2	3	13	0.0%	2
Primary School Education	2,224	2,617	2,954	3,327	3,736	14,858	55.2%	2,971
Secondary School Education	1,084	1,320	1,494	1,682	2,055	7,635	28.4%	1,527
Tertiary Education: Teacher Training	18	20	21	23	25	107	0.4%	21
Tertiary Education: University	249	269	283	305	330	1,436	5.3%	287
Management and Administration	486	523	562	604	650	2,824	10.5%	565
Science and Vocational Training	4.9	5.1	5.5	6	6.4	27.9	0.1%	6
Total Recurrent Resources	4,069	4,756	5,321	5,950	6,805	26,901.9		5,380

In terms of percentage allocation during the 2011-2015 NIF III period (Figure 7), Primary Education is planned to receive an estimated average of 67 percent of the total resources for recurrent expenditure during the NIF III period, followed by Secondary schools with a 20 percent share, then tertiary education at 10 percent. In addition, school feeding is to be funded for both Primary and Junior Secondary schools. It has been calculated as 800 ZMK per year per pupil with an increase of 8% per year. Management and Administration at all levels are earmarked 2 percent, while the Science and Vocational Training and Teacher Training will have less than one percent respectively.

Figure 7: Percentage share of Recurrent Expenditure by Sub-Sector 2011-2015



16.6 Required Capital Expenditure Resources

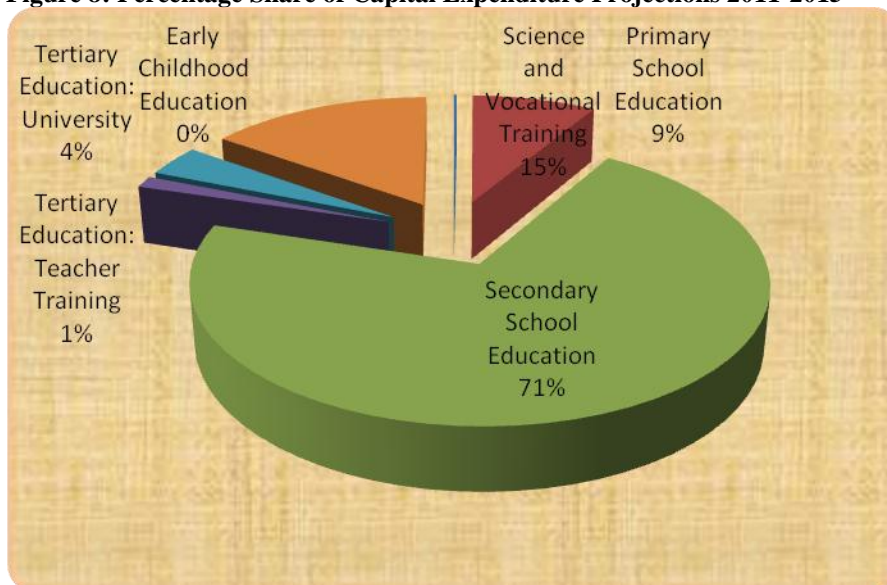
As the Ministry moves towards the attainment of the MDGS and the EFA goals by 2015, capital expenditure allocations will reduce. This is because MESVT would have increased the intake rates in the newly constructed class rooms. Thus, the total capital expenditure resource requirements during the NIF III period is put at K 6.272 Trillion (Table 28).

Table 28: Capital Expenditure Resources Projections 2011-2015								
(K billion)								
	2011	2012	2013	2014	2015	Total	% Share	USDm
Early Childhood Education	2	3	3	2	3	13	0.2%	2
Primary School Education	3	133	133	130	130	530	8.4%	106
Secondary School Education	690	840	975	975	975	4,455	71.0%	891
Tertiary Education: Teacher Training	15	16	18	19	21	89	1.4%	18
Tertiary Education: University	41	44	47	51	55	238	3.8%	48
Science and Vocational Training	136	179	195	211	227	948	15.1%	190
Total Capital Resources	887	1,214	1,371	1,388	1,411	6,272		1,254

In percentage terms, Secondary School educations will take up the largest share of capital expenditure resources, at 76 percent (Figure 8). This is mainly because of the many years of neglect occasioned on this sub-sector due to the over-prioritisation of primary/basic education by both Government and Cooperating Partners, as well as the intention to absorb Grade 8 and 9 learners at the Secondary Sub-Sector.

Infrastructure construction is one of the largest shares of the budget after Personal Emoluments. The amount of construction possible to be completed over the course of the NIF III requires some prioritisation and this has been taking into account in the scenarios described in this chapter. Secondary school construction (contractor mode) will rise from 26 to 46 for the last three years of the NIF III implementation period in the high case, and will be at about 20 schools per year each year for both the medium and base case scenarios. Secondary school classrooms in rural areas (community mode) will remain the same for both high and medium cases at almost 500 classrooms over the period, against a total of 200 for the base case scenario.

Figure 8: Percentage Share of Capital Expenditure Projections 2011-2015



16.7 Enrolment at Primary School Level (Grades 1-7)

The size of total enrolment is one of the most important variables in the computation of the required resources under NIF III. The enrolment is firstly determined by the school age population, which is estimated to be growing at 2.6 percent annually. The major development target at this level is to reach 98 percent Grade 7 completion rate by 2015, from the current level of 91.4 percent. The dropout rate would then need to be reduced to 2 percent during NIF III in order to reach the 98 percent completion rate by 2015. The base case scenario has calculated the completion rate of 85.2 percent would be reachable by 2015. It is estimated that 7 to 13 years old population will increase from 2,594,397 in 2010 to 2,805,640 in 2015. This has taken into account the policy of free primary education for all Zambian children up to Grade 7 and is used in all the scenarios in these projections.

The evolution of enrolment at primary school level is illustrated in Figure 9. The total enrolment at Primary School level is expected to drop to 2,882,083 Grade 1-7 pupils by 2015 from 2,943,975 in 2009. This is as a result of the implementation of the policy of enrolling all out-of-school children aged 7-10 years into Grade 1 since 2008. This policy has created an enrolment “bulge”, which will go through the system until the cohort exit the system in 2015. This is also reflected by the gradually decreasing GER over the projected period as illustrated in Figure 10.

Figure 9: Primary School level (Grades 1-7) Enrolment projection in millions

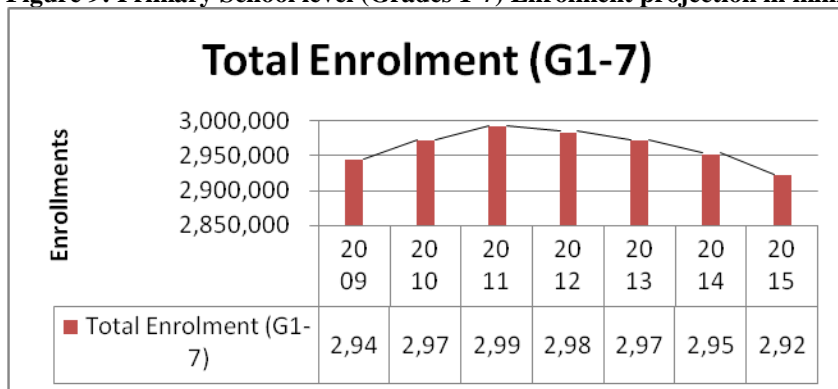
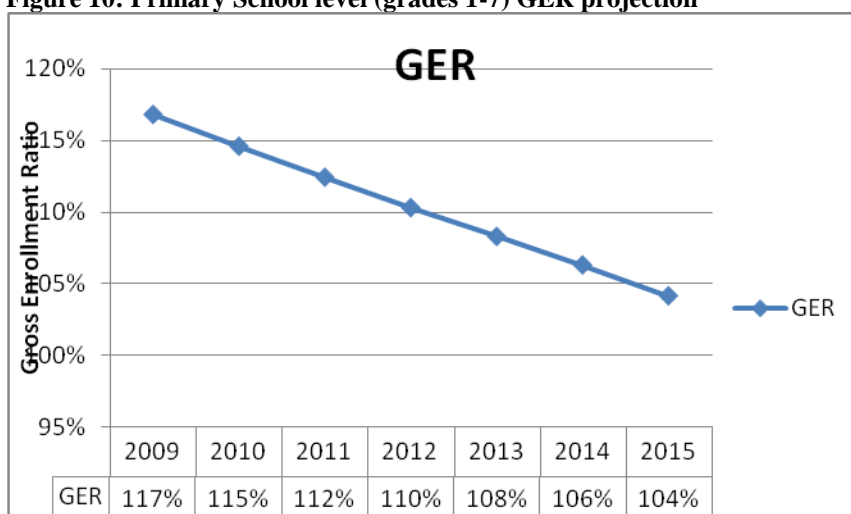


Figure 10: Primary School level (grades 1-7) GER projection



16.8 Enrolment at Junior Secondary School Level (Grades 8-9)

Large enrolment increases will be seen at junior secondary level with the transition rate from grade 7 to Grade 8 aimed at 90 percent and survival rate to grade 9 at 100 percent by 2015. It is estimated that the total enrolment in Grades 8 and 9 will be increased to over 593,990 in 2015 from 408,390 in 2009 in the high and medium case scenarios and down to 514,566 in the base case. The GER at this level will be increased from around 67 percent to 80 percent in 2015. Figure 11 reveals the steep increase in enrolment at this level. The enrolment bulge mentioned earlier will also ripple through the system for a few years and the GER can increase at this level without significant increase in transition rate between Grades 8 and 9. The projections in the model have included the provision of the free education policy up to grade 12 in the high case scenario only. The transition rate from Grade 7 to 8 is 90% in the high and medium cases and 75% in the base case scenario. Transition rates into Senior Secondary are set at 90% for the high case, 65% for the medium and 60% for the base case scenarios.

Figure 11: Junior Secondary School level (Grades 8-9) Enrolment projection

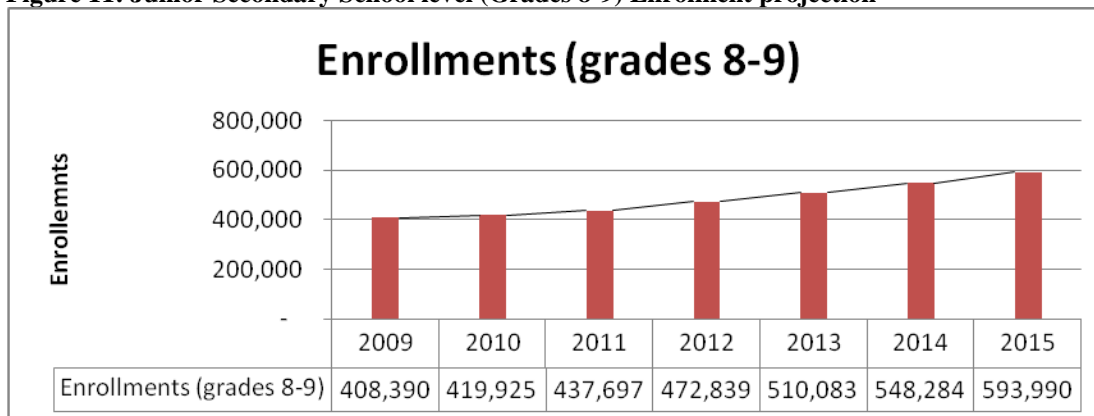
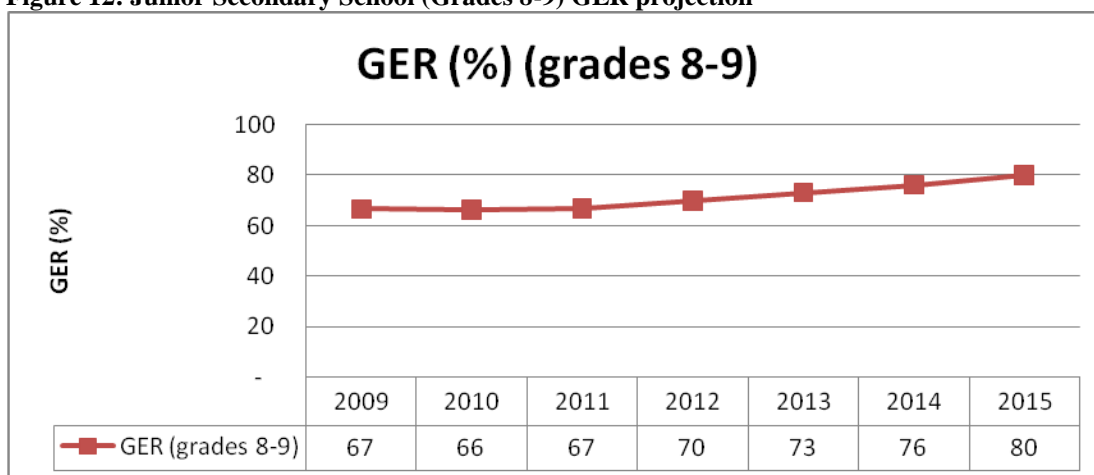


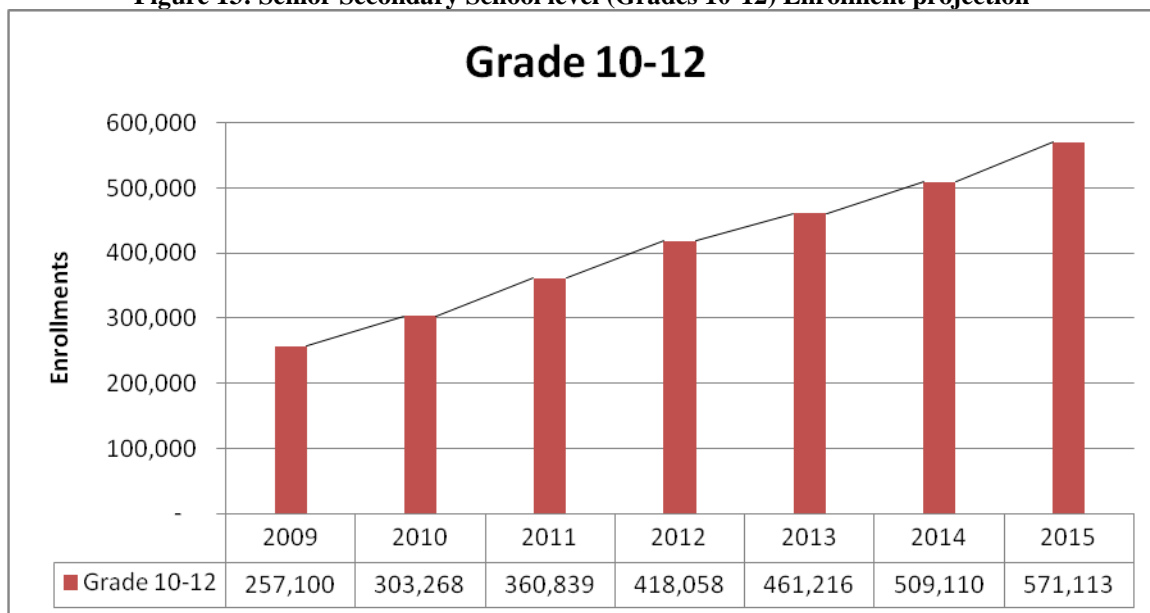
Figure 12: Junior Secondary School (Grades 8-9) GER projection



16.9 Enrolment at Senior Secondary School Level (Grades 10-12)

Senior Secondary School enrolment evolution is determined by the transition and completion rate targets from Grade 9 to Grade 10. Given the expected expansion of Grades 8-9 enrolment during NIF III period, the growth of the transition rate between Grades 9 and 10 may be restricted by the limited number of school places at this level. But with the government refocusing some of its efforts towards expanding access from primary to secondary school level during the NIF III period it is envisaged that there will some level of expansion of classroom space at this level therefore, a transition rate target of 76.8 percent by 2015 is used to project the enrolment at Senior Secondary level. The total enrolment is projected to increase from 257,100 in 2009 to 728,598 in the high case, 571,113 in the medium case and 504,932 in the base case scenario by 2015. The projections in the model have included the provision of the free education policy up to Grade 12 in the high case scenario only. Completion rates will vary because of the enrolment and transition rate variations in the model. Therefore, although completion rates for primary and junior secondary remain at the target of 85.2 percent and 65 percent respectively in all the scenarios, completion at Grade 12 is expected to be at 48.1% in the high case, 39.8% in the medium case and 43% in the base case scenario.

Figure 13: Senior Secondary School level (Grades 10-12) Enrolment projection



16.10 Teacher Needs and Teacher Training

Teacher needs are determined by the total enrolment together with pupil-teacher ratio targets. One key sector objective is to eliminate double-shifting of teachers at Primary School level by 2015. At this level, pupil-teacher ratio is determined by class size and average number of classes teachers teach as opposed to subjects. With the primary education policy set out in the SNDP for a recommended class size pegged at 40 pupils per class, coupled with the objective of eliminating double-shifting of teachers, the target pupil-teacher ratio (PTR) should be 40:1 by 2015. The higher case scenario takes this target fully into account. The medium case scenario uses a PTR of 45:1 and the base case scenario modifies PTR further to a ratio of 47:1 as achievable during the implementation of NIF III,

From Grade 8 onwards, pupil teacher ratio is determined by the formula below:

$$\text{PTR} = \frac{\text{class size} \times \text{number of teaching hours per week per teacher}}{\text{number of instruction hours per week per student}}$$

At Grades 8 - 9 level, with 40 pupils per class, 25 instruction hours for students and 20 hours of average teaching load for teachers, the targeted pupil teacher ratio will shift over the NIF III period from 29 up to 35 to 1. It is projected that the total number of teachers will range from 64,847 by 2015 for Grades 1-7 in the high case to 52,123 in the base case; 16,971 for Grades 8-9 in the high case down to 14,702 in the base case; and 27,395 for Grades 9-10 in the high case down to 13,561 in the base case scenario. The intention is still to maintain the addition of approximately 5,000 new teachers each year during the NIF III period.

The increasing need for teachers in the ministry will require increasing supply. Teacher training output is aimed at meeting three needs, namely; (a) teacher replacement; (b) increasing total number of teachers to cater for increasing enrolment; and (c) reaching targeted pupil-teacher ratios. Another important factor to consider during planning is that teacher training output should be kept relatively stable from year to year to ensure better efficiency in utilising teacher training resources. It is estimated that about 25,968 new teachers would be employed to meet all the needs

stated above during the NIF III period. This translates into an average of 5,194 new teachers per year.

The duration of training and output requirement determines the total enrolment needed at teacher training colleges. With the increase in the duration of teacher training from 2 years to 3 years, it will be imperative to raise the teacher training capacity by 50 percent in order to keep the output of new teachers stable. The total enrolment in teacher training colleges needs to increase from 16,000 to 24,000.

The cost per teacher has increased significantly during the period of NIF II. Projections on staff salaries showed an average of K 36.4 Million per year in 2009. This has increased to 50.6m ZMK in 2012 and is projected to increase to K 67.4 Million by 2015. This assumes that the salaries will increase at 10 percent per year throughout the period of NIF III. These projections have been used in all of the e scenarios.

16.11 Unit Cost and Total Recurrent Cost

In addition to teacher and non-teacher staff remuneration, which is assumed to keep pace with GDP per capita increase, the non-remuneration spending is essential for other educational inputs such as teaching and learning materials, school grants and other expenditures that positively affect the quality of learning. The non-remuneration spending estimates take into consideration the Government's commitment in education quality improvement, which is reflected in recent years with increased non salary spending in the form of school grants. The projection assumes that, at Primary School level, the non-salary spending will increase from around 10 percent to 25 percent of total recurrent spending. At Secondary School levels, the proportion increases from 10 percent to 30 percent. Total recurrent cost estimates at teacher training and university level are based on the constant proportion of unit cost and GDP per capita. The projection shows that, to reach the sector targets, the cost of investment in recurrent spending will have to reach 4.2 percent of GDP by 2015.

16.12 NIF III Resource Envelope

The resource envelope is the sum total of resources from government, Cooperating Partners and the private partnership. The projection of the resource envelope is presented herein with the Government's assumptions for the education sector specified. The assumptions take for granted the continuation of the stated macro and sector-level policy conditions and the anticipated levels of commitment from CPs. It should be pointed out here that the CPs overall contribution to the sector has significantly reduced due to the exiting of the Netherlands and Denmark from the sector. The resource envelope, pegged at K31.982 trillion, provides an indication of the level of expenditures to cover both recurrent and capital that the Government plans to incur over the 2011-2015 NIF III period. Table 16 presents a summary of the resource envelope while Annex 14 presents planned activities for budgeting and funding during the 2011-2015 period.

Table 29: Resource Envelope 2011-2015

(K billion)							
	2011	2012	2013	2014	2015	Total	US\$m
GRZ Funding	4,494	5,420	6,106	6,885	7,771	30,676	6,135
Cooperating Partner Funding	91	294	301	309	311	1,306	261
Total Resource Envelope	4,585	5,714	6,407	7,194	8,082	31,982	6,396
Financing Gap	683	521	285	145	133	1,191	238

16.13 NIF III Broad Funding Assumptions

The SNDP provides the broad policy thrust and expenditure objectives and has defined the parameters of the resource envelope. The MTEF, which is a three-year rolling planning instrument, will annually specify the programmes and resources available to be applied in the identified priority projects depending on economic circumstances and external donor inflows. The SNDP that is being implemented through NIF III for the education sector has been constructed on the basis of two major assumptions. These are: (a) accelerated growth and poverty reduction through the scaling-up of implementation of the SNDP programmes in the key sectors of the Plan, which include the Education and Training sector; and (b) a stable resource envelope based on an anticipated scaling-up of both domestic revenue and CPs contributions through aid.

The anticipated flow of aid to the sector takes cognisance of the fact that, while some of the major CPs in the education sector have, or are in the process of pulling out, the entry of new CPs would reduce or eliminate the funding gap thus created. With regard to domestic revenues, the expectation is that the tax review exercise and the reforms to be carried out by the Government during the SNDP period will yield some positive benefits in terms of broadening the tax base.

In addition to the broad funding assumptions stated above, the following constitute important elements that would supplement and compliment the resource generation, management and monitoring functions:

- (a) The Government assumes that CPs will programme grants to the sector over a multi-year timeframe and concurrently make multi-year funding commitments to enable NIF III to adequately plan its fiscal projections in the context of the MTEF;
- (b) The Government assumes that the procedures and timetables for all approved programmes under NIF III will be synchronized with the monitoring and annual reviews of the SNDP so that progress reports at these levels feed into the overall plan performance assessment;
- (c) The Ministry assumes that the development and strengthening of mechanisms for measuring the SNDP/NIF III performance will be through strong monitoring mechanisms with clear performance indicators. This shall be an essential part of the Ministry's functions and as such, a Performance Assessment Framework (PAF) shall be developed and agreed upon with all relevant stakeholders which will help the Ministry work towards strengthening the reporting and monitoring systems in a way that would allow the sector to fully capture the total expenditure pattern under the SNDP; and
- (d) In the spirit of partnership and information sharing, the Ministry shall engage all partners during NIF III implementation. The Ministry and CPs in the education sector shall

sign a Mutual Accountability Framework (MAF) and Joint Financing Agreement (JAF) for NIF III that shall guide their partnership in the sector focusing on common reporting and monitoring mechanisms and external support during the SNDP period, reflecting, *inter alia*, the funding modalities to be agreed up on. The aim is to foster a sense of cooperation and partnership with CPs through regular consultation while firmly maintaining sectoral control and leadership within the Ministry.

A summary of the high, medium and base case scenarios described here are included in annexes 1-3. Table 30 shows the indicative activities for budgeting and funding the 2011-2015 NIF II period.

Table 30: Planned Activities for Budgeting and Funding during the 2011-2015 Period							
Objective	Strategies	Key Activities	Performance Indicators			Expected outcomes	Core Implementers
			Indicators	Baseline (2009)	Target (2015)		
To maintain a sufficient level of funding for the implementation of the NIF III	Ensure sufficient funding is available for full implementation of NIF III	Maintain % of budget for education sector	Budget of MESVTEE as % of total GRZ budget	19.9%	20%		
			Execution rate of the MESVTEE budget (a) PEs (b) Non-PE Recurrent (c) Capital	87.2% (total) (a) 118% (b) 65% (c) 62%	95% (a) 100% (b) 90% (c) 80%		
			Increase of MESVTEE budget in real terms	K3,321 billion	K7,770 billion		

Annex 1: High Case Scenario Summary

Policy Targets	2011	2012	2013	2014	2015
% of pupils in community schools	14.5%	12.1%	9.7%	7.4%	5.0%
Grade 7 repetition rate	9.8%	9.4%	8.9%	8.5%	8.0%
Transition rate Grades 7 to 8	69%	75%	80%	85%	90%
Transition rate Grades 9 to 10	63%	70%	77%	83%	90%
Pupil-Teacher Ratio targets					
Grades 1-7	49	47	44	42	40
Grades 8-9	35	35	35	35	35
Grades 10-12	25	25	25	25	25
Infrastructure Construction					
Primary classrooms (community mode)	0	0	1,200	1,200	1,200
Lower Secondary Schools (contractor mode)	5	5	4	4	0
Secondary school (contractor mode)	26	20	46	46	46
Secondary classrooms rural (community mode)	168	164	164	0	0
Key sector indicators					
	2011	2012	2013	2014	2015
Enrolment					
Grades 1-7	2,976,913	2,961,978	2,943,397	2,918,245	2,882,083
Grades 8-9	437,697	472,839	510,083	548,284	593,990
Grades 10-12	371,588	450,896	529,254	618,498	728,598
Gross Enrolment Ratio					
Grades 1-7	117	117	114	112	109
Grades 8-9	67	65	65	68	71
Grades 10-12	30	33	39	46	52
Completion rate (%)					

Grade 7	90.7	88.2	86.4	86.4	85.2
Grade 9	54.4	56.7	59.6	62.1	64.7
Grade 12	24.6	32.6	38.5	42.0	48.1
Number of teachers					
Grades 1-7	49,996	53,379	57,009	60,856	64,847
Grades 8-9	11,380	12,294	13,262	14,255	16,971
Grades 9-10	13,972	16,954	19,900	23,256	27,395
Key unit costs	2011	2012	2013	2014	2015
	44,044,00	50,609,00	55,669,90	61,236,89	67,360,57
Average teacher salary (ZMK)	0	0	0	0	9
High School construction (ZMK billion)	650	500	1,771	1,771	1,771
Bursary (ZMK)	700,000	700,000	700,000	700,000	700,000
Capitation grant per pupil (Primary)	43,324	46,790	50,534	54,576	58,942
Capitation grant per pupil (Secondary)	199,024	214,946	232,142	250,713	270,770
Recurrent Programme Budgets (ZMK billions)					
Capitation Grants	222	258	297	344	402
Education Materials	27	31	34	39	44
Bursary Support	4	5	5	5	6
School Health & Nutrition	3	3	4	4	4

High-Case Financing Projections (ZMK billions)

	2011	2012	2013	2014	2015	Total

Sector Financing Needs						
Personal Emoluments	3,381	4,246	5,087	6,093	7,429	26,237
Non PE recurrent costs	673	746	827	918	1,024	4,187
Capital - infrastructure	799	899	2,400	2,377	2,267	8,741
Early Childhood Education	4	5	6	4	6	25
Science Technology & Vocational Training	141	184	201	217	233	976
Tertiary - Teacher Education	33	36	39	42	46	196
Tertiary - University	373	403	424	458	495	2,153
Total NIF III Costs	5,404	6,520	8,982	10,109	11,499	42,514
Resource envelope						
GRZ funding	4,494	5,420	6,145	6,972	7,916	30,947
CP funding	91	294	301	309	311	1,305
Total Resource Envelope	4,585	5,714	6,446	7,281	8,227	32,252
						-
Financing Gap	819	806	2,537	2,828	3,272	10,262
Financing Gap (US\$ millions)	\$164	\$161	\$507	\$566	\$654	\$2,052

Annex 2: Medium Case Scenario Summary

Policy Targets	2011	2012	2013	2014	2015
% of pupils in community schools	16.1%	14.6%	13.1%	11.5%	10.0%
Grade 7 repetition	9.8%	9.4%	8.9%	8.5%	8.0%
Transition rate Grades 7-8	69%	75%	80%	85%	90%
Transition rate Grades 9 to 10	55%	58%	60%	63%	65%
Pupil-Teacher Ratio targets:					
Grades 1-7	50	49	48	46	45
Grades 8-9	35	35	35	35	35
Grades 10-12	25	25	25	25	25
Infrastructure Construction:					
Upper-Basic Schools (contractor mode)	5	5	4	4	0
High School (contractor mode)	26	20	20	20	20
Secondary classrooms rural (community mode)	168	164	164	0	0
Key sector indicators					
Enrolment					
Grades 1-7	2,976,913	2,961,978	2,943,397	2,918,245	2,882,083
Grades 8-9	437,697	472,839	510,083	548,284	593,990
Grades 10-12	360,839	418,058	461,216	509,110	571,113
Gross Enrolment Ratio					
Grades 1-7	117	117	114	112	109
Grades 8-9	67	65	65	68	71
Grades 10-12	30	33	38	42	45
Completion rate (%)					
Grade 7	90.7	88.2	86.4	86.4	85.2
Grade 9	54.4	56.7	59.6	62.1	64.7

Policy Targets	2011	2012	2013	2014	2015
Grade 12	24.6	32.6	36.0	36.8	39.8
Number of teachers					
Grades 1-7	47,355	49,145	50,964	52,759	54,439
Grades 8-9	11,380	12,294	13,262	14,255	16,971
Grades 9-10	13,568	15,719	17,342	19,143	21,474
Key unit costs					
	2011	2012	2013	2014	2015
Average teacher salary (ZMK)	44,044,000	50,609,000	55,669,900	61,236,890	67,360,570
High school construction (ZMK billion)	0	0	0	0	9
Bursary (ZMK)	650	500	770	770	770
Capitation grant per pupil (Primary)	700,000	700,000	700,000	700,000	700,000
Capitation grant per pupil (Secondary)	43,324	46,790	50,534	54,576	58,942
Capitation grant per pupil (Secondary)	199,024	214,946	232,142	250,713	270,770
Recurrent Programme Budgets (ZMK billions)					
Capitation Grants	220	251	282	317	360
Education Materials	27	30	33	37	41
Bursary Support	4	5	5	5	6
School Health & Nutrition	3	3	4	4	4

Medium-Case Financing Projections (ZMK billions)

	2011	2012	2013	2014	2015	Total

Policy Targets	2011	2012	2013	2014	2015	
Sector Financing Needs						
Personal Emoluments	3,247	3,969	4,608	5,346	6,329	23,499
Non PE recurrent costs	671	739	810	888	978	4,085
Capital - infrastructure	799	899	1,255	1,232	1,122	5,306
Early Childhood Education	4	5	6	4	6	25
Science Technology & Vocational Training	141	184	201	217	233	976
Tertiary - Teacher Education	33	36	39	42	46	196
Tertiary - University	373	403	424	458	495	2,153
Total NIF III Costs	5,268	6,235	7,341	8,187	9,209	36,240
Resource envelope						
GRZ funding	4,494	5,420	6,124	6,926	7,839	30,803
CP funding	91	294	301	309	311	1,305
Total Resource Envelope	4,585	5,714	6,425	7,234	8,150	32,108
						-
Financing Gap	683	521	916	952	1,058	4,131
Financing Gap (US\$ millions)	\$137	\$104	\$183	\$190	\$212	\$826

Annex 3: Base Case Scenario Summary

Key NIF III Policy Targets	2011	2012	2013	2014	2015
% of pupils in community schools	16.1%	14.6%	13.1%	11.5%	10.0%
Grade 7 repetition	9.8%	9.4%	8.9%	8.5%	8.0%
Transition rate Grades 7-8	64%	67%	70%	72%	75%
Transition rate Grades 9 to 10	53%	55%	57%	58%	60%
Pupil-Teacher Ratio targets					
Grades 1-7	51	50	49	48	47
Grades 8-9	35	35	35	35	35
Grades 10-12	29	31	33	35	35
Infrastructure Construction					
Upper-Basic Schools (contractor mode)	0	0	0	0	0
High School (contractor mode)	10	10	20	20	20
Secondary classrooms rural (community mode)	40	40	40	40	40
Key sector indicators					
Enrollment					
Grades 1-7	2,976,913	2,961,978	2,943,397	2,918,245	2,882,083
Grades 8-9	429,455	448,338	467,890	488,055	514,566
Grades 10-12	358,689	411,490	442,649	470,789	504,932
Gross Enrollment Ratio					

Grades 1-7	117	117	114	112	109
Grades 8-9	67	65	64	65	65
Grades 10-12	30	33	37	42	43
Completion rate (%)					
Grade 7	90.7	88.2	86.4	86.4	85.2
Grade 9	54.4	54.9	55.6	56.2	56.9
Grade 12	24.6	32.6	35.5	35.8	37.0
Number of teachers					
Grades 1-7	46,736	48,162	49,577	50,927	52,123
Grades 8-9	11,166	11,657	12,165	12,689	14,702
Grades 9-10	11,626	12,477	12,609	12,644	13,561
Key unit costs					
	2011	2012	2013	2014	2015
Average teacher salary (ZMK)	44,044,000	50,609,000	55,669,900	61,236,890	67,360,579
High School construction (ZMK billion)	250	250	770	770	770
Bursary (ZMK)	700,000	700,000	700,000	700,000	700,000
Capitation grant per pupil (Primary)	43,324	46,790	50,534	54,576	58,942
Capitation grant per pupil (Secondary)	199,024	214,946	232,142	250,713	270,770
Recurrent Programme Budgets (ZMK billions)					
Capitation Grants	219	248	275	304	337
Education Materials	27	30	33	36	39
Bursary Support	4	5	5	5	6
School Health & Nutrition	3	3	4	4	4

Financing Projections (ZMK billions)

	2011	2012	2013	2014	2015	Total
Sector Financing Needs						
Personal Emoluments	3,125	3,723	4,206	4,740	5,487	21,281
Non PE recurrent costs	670	736	803	874	953	4,035
Capital - infrastructure	693	973	1,108	1,105	1,105	4,984
Early Childhood Education	4	5	6	4	6	25
Science Technology & Vocational Training	141	184	201	217	233	976
Tertiary - Teacher Education	33	36	39	42	46	196
Tertiary - University	290	313	330	356	385	1,674
Total NIF III Costs	4,956	5,970	6,692	7,338	8,215	33,172
Resource envelope						
GRZ funding	4,494	5,420	6,106	6,885	7,771	30,675
CP funding	91	294	301	309	311	1,305
Total Resource Envelope	4,585	5,714	6,406	7,193	8,082	31,980
						-
Financing Gap	371	256	285	145	133	1,191
<i>Financing Gap (US\$ millions)</i>	<i>\$74</i>	<i>\$51</i>	<i>\$57</i>	<i>\$29</i>	<i>\$27</i>	<i>\$238</i>

