REPUBLIC OF NAMIBIA

Education and Training Sector Improvement Programme (ETSIP)

Planning for a Learning Nation

PROGRAMME DOCUMENT: PHASE I (2006 -2011)

FEBRUARY 2007

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TABLE OF CONTENTS

ACRONYMS

ACTE	Advisory Committee on Teacher Education
CBET	Competency Based Education and Training
CIET	Centre for Innovation, Entrepreneurship and Technology
COSDEC	Community Skills Development Centre
CPD	Continuous Professional Development
DNEA	Directorate of National Examinations and Assessment
DRFN	Desert Research Foundation of Namibia
ECD	Early Childhood Development
EMIS	Education Management Information System
EPCC	ETSIP Programme Coordinating Committee
ETSIP	Education and Training Sector Improvement Programme
FDIs	Foreign Development Investments
HAMU	HIV and AIDS Management Unit
GRN	Government of the Republic of Namibia
IALL	Information, Adult and Life Long Learning
ICT	Information Communications Technology
IMS	Information Management System
KBE	Knowledge Based Economy
KIMS	Knowledge and Information Management System
LTR	Learner:Teacher Ratio
MoE	Ministry of Education
MGECW	Ministry of Gender Equality and Child Welfare
MWTC	Ministry of Works, Transport and Communication
MIS	Management Information System
MTP	Medium Term Plan
MTEF	Medium Term Expenditure Framework
MTTT	Medium Term Technical Team
NAMCOL	Namibian College of Open Learning
NCHE	National Council for Higher Education
NCRST	National Commission on Research, Science and Technology
NDP	National Development Plan (NDP 2 = 2nd National Development Plan)
NIED	National Institute for Educational Development
NKIS	National Knowledge and Innovation System
NPC	National Planning Commission
NRSTF	National Research, Science and Technology Fund
NQA	Namibia Qualifications Authority
NQF	National Qualifications Framework
NOLNet	Namibian Open Learning Network
NTA	Namibia Training Authority
ODL	Open and Distance Learning
OVCs	Orphans and Vulnerable Children
PAD	Planning and Development
PoN	Polytechnic of Namibia
PQA	Programmes and Quality Assurance
R&D	Research and Development
RACE	Regional AIDS Committees for Education
UNAM	University of Namibia
VET	Vocational Education and Training
VTC	Vocational Training Centre

PREFACE

Education and training in Namibia is at a turning point.

We have analysed the education and training system in detail. Although the many positive developments, achievements and the progress in the sector over the last 15 years are recognised and appreciated, the analysis focused on the shortcomings of the system in order to enable us to design an improvement programme. We now know what is working and what is not working. Indeed, it has been shown – quite alarmingly – that too many of our children are not gaining the basic skills of functional literacy and numeracy. Progress towards equity in education has not been rapid enough. More than that, at the current level of performance in education, we will not be producing citizens who are capable of making Namibia a knowledge-based economy as is expected of us in Vision 2030.

There are also serious management and efficiency issues. The salary bill is higher than what the country can afford, even though the lion's share of the national budget is devoted to education. As a result, vital inputs such as textbooks and library books and other learning materials are being reduced, threatening the quality of learning. Our attention to HIV and AIDS must be sustained. Education must make the pro-poor contribution that is rightly expected of us in the National Poverty-Reduction Strategy.

We have taken time, as this document shows, to set objectives and to plan what we must do to turn the system around and bring about big improvements. Namibia has never before had such a detailed, complex and broad-based plan of action for education. In fact, readers should be aware that for each component mentioned here there is a detailed programme setting out what should be done by whom and by when to achieve it.

The time has therefore come for ETSIP to be implemented with energy, and for the effects to be felt on the ground, in the schools and colleges, in vocational training centres, and wherever organised learning is taking place. Education systems are always difficult to change; they are so huge and involve almost every one of us personally. It is therefore very important that all of us go about this historic change in education with clarity, determination and unity of purpose. After all, how successful we are in the education system will largely determine how successful we are in creating that better future that we long for.

I am most grateful to the many hands that have developed ETSIP over the past three years: members of staff of the Education Sector Ministries, and of all our kindred institutions and organisations. You have made this our plan. I also wish to extend our thanks to the World Bank, to the European Union and Sida, and to the Bank of Namibia and NamPower, who financed the many studies and preparations that have gone into formulating ETSIP. Without your assistance we may not have got this far, and we look forward to your company on the new road. My profound appreciation is extended to the Right Honourable Nahas Angula, Prime Minister of the Republic of Namibia, for initiating the World Bank study which led to the development of ETSIP and for his leadership and guidance throughout the process. My gratitude also goes to His Excellency Hifikipunye Pohamba, President of the Republic of Namibia, for entrusting me with the responsibility of the Ministry of Education.

I now call upon the entire education and training sector to throw their full weight behind ETSIP in order to make the learning nation a reality.

Nangolo Mbumba
MINISTER OF EDUCATION

3 April 2006

RATIONALE FOR ETSIP

1. Inspired and guided by our national vision statement—*Vision 2030*—Namibia is currently undergoing a dramatic reform of its overall national development strategy. *Vision 2030* sets a very ambitious target that, by 2030, *Namibia should join the ranks of high income countries and afford all its citizens a quality of life that is comparable to that of the developed world*. With emphasis on enhanced quality of life for **all**, *Vision 2030* calls for the intended rapid *economic growth* to be accompanied by *equitable social development*. These twin goals of growth with equity are to be pursued within a broader strategic framework of transforming the economy into a knowledge-based economy. Namibia is, of course, also fully cognisant of the threat to development posed by HIV and AIDS. Thus, critical national development documents, in line with the Millennium Development Goals, highlight strategic national goals as: (i) the acceleration of growth; (ii) equitable social development, including employment creation and poverty eradication, and (iii) curbing the spread of HIV and AIDS.

2. A critical impediment to the acceleration of growth is the sluggish and sometimes even declining productivity in some of the sectors. Recent analyses show that total factor productivity (TFP) declined from 2.5% in 1991-1997 to 0.5% in 1997-2000; yet TFP is known to be the real driver behind growth. Without real growth in productivity, Namibia will not be able to realise its intended growth acceleration. As the evidence shows, consistent with declining productivity, the period of 1998 to 2001 was characterised by a slow decline in real GDP growth; with 2001 marking the lowest ebb of post-independence growth with a rate of 2.4%. Refreshingly, GDP growth accelerated to 3.5% in 2003 and 6% in 2004, but levelled back to 3.2% in 2005. This pace of growth falls far short of getting Namibia on a steady path toward the ranks of high income Knowledge Based Economies by 2030. Thus, even with some signs of recovery, there is still a grave cause for unease about whether we are on track toward actualizing *Vision 2030.*

3. Without an acceleration in economic growth, it is difficult for Namibia to create jobs, especially jobs that signal productivity growth, reduce poverty and attain equitable social development. Productivity growth is therefore a critical factor for the realization of strategic development goals. To this end, a knowledge-based Namibian economy will focus on the creation and application of knowledge and technology to improve the range and value of products from Namibia's rich natural endowment - ranging from minerals to its unique landscapes. Productivity growth - particularly higher value-added productivity - is expected to increase Namibia's gains from the export of its natural resources. Productivity growth is also expected to improve local investment returns, consequently, to reduce domestic capital flight.

4. Several analyses point out that **one** of the key impediments to productivity growth is the shortage of skilled workers of various levels and types. Employers note the shortage of qualified artisans and technicians as a critical constraint on increasing their productivity. At the higher levels, there is a shortage of managers (especially business managers), engineers, medical doctors, researchers, and others required to provide technical leadership in the country's quest to intensify the creation and application of knowledge to improve productivity.

5. Namibia receives low international competitiveness ratings because of its inability to meet firms' demands for skilled labour, the low absorptive capacity for existing technology at the firm level and low investment in research and development.

6. Shortages of skilled labour persist within a context of unmet labour market demand. For instance, unemployment levels among secondary school graduates with some level of training stands at 4%. For those with some form of tertiary education, the proportion is 2%. Given the demand for labour, a key constraint lies on the supply side - or basically, the education and training system.

7. Other than economic benefits, an effective education and training system has well- documented broader benefits that are critical to development. These benefits include: poverty reduction and social equity; social vaccine for HIV/AIDS; improved absorptive capacity for other social

services, including health and education itself; low fertility rates; higher use of contraceptives; better social participation and the resultant participatory democracy; and good governance.

8. The expected economic and social benefits of education notwithstanding, recent analyses have characterised Namibia's education and training system as a very weak tool for supporting the realisation of national development goals, especially the intended transition to knowledge-driven growth and equitable social development. In a nutshell, the current education and training system is not able to rise to the call of *Vision 2030*, and heighten its contribution to the actualisation of Vision 2030, and the realisation of national development goals.[1]

9. Key sector weaknesses pertain to: (a) low quality and effectiveness as evidenced in low student learning outcomes; (b) low efficiency in the use of available resources; (c) persisting inequalities in the distribution of education inputs and outcomes; (d) low capacity for knowledge creation and application; and (c) doubtful development and market relevance. In addition to these weaknesses, studies identify: (a) inadequate financial resources; (b) low system delivery capacity, and (c) the scourge of HIV/AIDS as key constraints to the transformation of the education and training system into an effective tool for supporting development.

PROGRAMME OVERVIEW

10. ETSIP represents the education and training sector's response to the call of *Vision 2030. Its key purpose is to substantially enhance the sector's contribution to the attainment of strategic national development goals, and to facilitate the transition to a knowledge based economy.* In the immediate future, it will improve the quality, range and threshold of skilled labour required to improve knowledge-driven productivity growth, and thus contribute to economic growth. By adopting a pro-poor approach to the distribution of opportunities for high quality and market-responsive education and training opportunities, ETSIP will also contribute directly to the attainment of equitable social development.

11. ETSIP is premised on a realisation that a weak education and training system cannot facilitate the attainment of complex and ambitious development goals. ETSIP represents a sustained response of the sector, based on a fifteen-year strategic plan accepted by the Namibian Government in 2005.[2] For ease and feasibility of implementation, ETSIP is phased into three five-year cycles, with the first cycle spanning 2006/07 to 2010/11, which coincides with the Third National Development Plan. It is a comprehensive sector-wide programme that covers: (i) early childhood development and pre-primary education, (ii) general education, (iii) vocational education and training, (iv) tertiary education and training, (v) knowledge and innovation, and (vi) information, adult and lifelong learning.

12. In response to immediate needs, the first phase of ETSIP will focus on *strengthening of the immediate supply of middle to high level skilled labour to meet labour market demands and support overall national development goals.* As pointed out, the supply of labour is critical for improving not only overall productivity, but also higher value-added productivity. Because productivity growth is tantamount to economic growth, strengthening the supply of labour becomes very critical to the attainment of the first strategic development goal; i.e., acceleration of economic growth. Strengthening labour supply is also critical for its regenerative capacity to further produce skilled labour. This regeneration is best illustrated in the production of educators, firm level trainers, and researchers whose facilitation and knowledge outputs spur knowledge production, application and innovative entrepreneurship. A pro-poor expansion of the skill base will also contribute to the reduction of capability poverty, income poverty, and social inequalities.

[1] See Mmantsetsa T Marope, Namibia Human Capital and Knowledge Development for Economic Growth with Equity, World Bank, 2005

[2] The Strategic Plan for the Education and Training Sector Improvement Programme (ETSIP) 2005-2020: Planning for a Learning Nation, Windhoek, February 2005.

13. Three components will operationalise this first strategic sector objective. These are: (*a) a pro-poor expansion of opportunities for high quality senior secondary education; (b) a pro-poor expansion of opportunities for high quality and market responsive vocational education and training;* and *(c) an expansion of pre-entry programmes for tertiary education and training.* It is expected that, in the long term, as the overall quality of education and training improves, it will become less and less necessary to maintain tertiary pre-entry programmes. All that said, collectively, these components will ensure an immediate injection of skilled labour of various levels and types. The pro-poor orientation is meant to strengthen the sector's contribution to the second strategic development goal of equitable social development.

14. The first phase of ETSIP will *strengthen the quality, effectiveness, and efficiency of the general education and training system*. This strategic sector goal is critical for ensuring an enduring supply of candidates that will take up opportunities for senior secondary education and training, tertiary education and training, and lifelong learning.

15. Components that will operationalise the quality improvement element of the above sector strategic goal include: *(a) clear definition of skills and competencies that learners must acquire at each level, ensuring consistency with competencies proven to be critical for effective functioning in a knowledge based Economy (KBE); (b) strengthening of educators to ensure that they can effectively facilitate the acquisition of set skills and competencies; (c) increasing the provision of books and instructional materials to support educators in their facilitation of learning; (d) improving of learner assessment and system evaluation to ensure that we can verify when learners have acquired set skills and competencies; and if the system is effective at facilitating this acquisition; (e) strengthening managers' and teachers' accountability for system effectiveness and learner acquisition of set skills and competencies.*

16. It is expected that the above-outlined quality improvement measures will lead to improved internal efficiency as evidenced in reduced drop-out rates, reduced repetition, and better throughput. Further reduction in learner repetition will accrue from improved implementation of the policy on learner repetition. Expansion of opportunities for senior secondary education and post-basic vocational education and training will reduce the currently high grade 10 'pushout' rates.

17. Greater efficiency in resource utilization will be realised through a range of policy measures including: higher learner:teacher ratio, de-linking increments in teacher salaries from irrelevant and non-required qualifications, abating the pace of increase in teacher salaries; and improving and implementing staffing norms within the sector.

18. Among other factors, an underlying cause of the poor quality and internal inefficiency of the general education system is that the majority of learners enter the system without the pre-requisite learning readiness. To begin to stem this problem, ETSIP underscores the importance of pre-school education (improving learning readiness at primary school entry). This will be attained by *improving equitable access to high quality early childhood development and pre-primary education and family literacy.*

19. Components that will operationalise this strategic sector goal include: *(a) strengthening capacity for the management and delivery of ECD and pre-primary; and (b) improvement of teacher quality and improvement of the supply of instructional materials.*

20. Also in the medium term the first phase of ETSIP will: *(a) strengthen and systematise the current knowledge creation and innovation system to ensure adequate capacity for the production and application of knowledge to improve productivity growth; (b) strengthen effective demand for knowledge and innovation required to facilitate productivity growth; and (c) develop and sustain a vibrant knowledge marketplace.* Key components that will operationalise the above sector strategic goals are: *(a) strengthening the policy and legal frameworks for knowledge and innovation; (b) strengthening the institutional framework through the establishment of the Centre for Innovation, Entrepreneurship and Technology (CIET) and the Council on Research, Science*

and Technology (CRST); and (c) ensuring the adequacy of funding for demand-led research and development (R&D).

21. For their combined effect, the above components will heavily depend on the effectiveness of the tertiary education and training sub-programme's success in strengthening the supply of high quality and high level knowledge workers who can lead research and development, and who can spur innovation, in collaboration with productive sectors. In this regard, one of the strategic goals of ETSIP is to *improve the effectiveness, quality, efficiency, and development-relevance of the tertiary education and training system.* During the first phase of the programme, this goal will be attained through the following key components: *(a) strengthening institutional capacity for the management and delivery of tertiary education and training; (b) building capacity for graduate studies with emphasis on research; (c) improvement of quality and readiness of intake; (d) strengthen quality assurance mechanisms; and (e) diversification and mobilisation of financing resources.*

22. For immediate and long term needs, the first phase of ETSIP will also *strengthen the policy, legal and institutional frameworks to support equitable access to high quality and responsive adult learning.* A critical part of an innovative and self-renewing knowledge based economy is its agility to manage and apply knowledge. Part of knowledge management, is the ability to declare obsolete knowledge obsolete, and to replace it with current knowledge. As knowledge currency becomes an imperative for global competitiveness and co-operation, adult learning becomes a vital tool for the constant re-tooling of 'knowledge workers' and for ensuring their sustained contribution to development. As indicated by the subtitle of ETSIP, "Planning for a Learning Nation," ETSIP is also seen as a programme to promote lifelong learning, through its comprehensive, societal and integrated approach to learning. The emphasis which has been placed on the economic importance of education in the rationale does not mean that other important aspects of education such as the development of a democratic culture or ethics (already part of the education system) are to be neglected.

23. A critical part of an innovative and self-renewing knowledge based economy is its agility to manage and apply knowledge. Part of knowledge management, is the ability to declare obsolete knowledge obsolete, and to replace it with current knowledge. Effective and efficient knowledge management systems with equitable access networks are needed to support all levels of education, research, innovation and skills acquisition. As knowledge currency becomes imperative for global competitiveness and co-operation, adult learning and access to relevant information become vital tools for the constant re-tooling of 'knowledge workers' and for ensuring their sustained contribution to development. As indicated by the subtitle of ETSIP, "Planning for a Learning Nation," ETSIP is also seen as a programme to promote lifelong learning, through its comprehensive, societal and integrated approach to learning. For immediate and long term needs, the first phase of ETSIP will as a crucial crosscutting support system *(a) strengthen the policy, legal and institutional frameworks to support equitable access to information and knowledge and high quality and responsive adult learning (b) Improve equity and access to lifelong learning opportunities (c) Improve equity in access to information and learning resources (d) Improve the quality and effectiveness of national knowledge management systems.*

CRITICAL SECTOR PRIORITIES

24. During the first phase of ETSIP, critical priorities, and in sequential order are: (a) pro-poor expansion of high quality senior secondary education, vocational education and training, pre-entry tertiary education and training programmes; (b) building system equity, quality and efficiency; (c) strengthening system delivery capacity; (d) strengthening the system's response to HIV/AIDS; (e) strengthening the national knowledge and innovation system; and (e) creating an enabling environment for the development of lifelong learning.

25. The 15-year ETSIP strategic framework took as its starting point the findings and analysis in the education sector report, *"Human Capital and Knowledge Development for Economic Growth with Equity."* (2004) The strategic framework identifies five main strategic objectives: (i) Quality/effectiveness, (ii) Equity and Access, (iii) Development relevance and Responsiveness, (iv) Delivery Capacity and Management and (v) Efficiency of resource mobilization and utilisation. The set of strategic objectives is common across the sub-programmes, but each sub-programme has its own order of priority. The following table presents the priority order of strategic objectives by sub-programme.

Strategic Objectives by Sub-Programme and Order of Priority

Sub-programme	Policy Objectives				
	1st	2nd	3rd	4th	5th
Early Childhood Development & Pre-Primary Education	Delivery capacity and management	Quality / effectiveness	Efficiency of resource mobilization and utilization	Equity and access	
General Education	Quality / effectiveness	Equity and access	Efficiency of resource mobilization and utilization	Delivery capacity and management	Development relevance and Responsiveness
Vocational Education and Training	Delivery capacity and management	Quality / effectiveness	Efficiency of resource mobilization and utilization	Development relevance and Responsiveness	Equity and access
Tertiary Education and Training	Delivery capacity and management	Development relevance and Responsiveness	Quality / effectiveness	Equity and access	Efficiency of resource mobilization and utilization
Adult Education and Lifelong Learning	Development relevance and Responsiveness	Delivery capacity and management	Quality / effectiveness	Equity and access	Efficiency of resource mobilization and utilization
HIV and AIDS	Delivery capacity and management	Development relevance and Responsiveness	Equity and access	Quality / effectiveness	Efficiency of resource mobilization and utilization
ICTs in education	Delivery capacity and management	Development relevance and Responsiveness	Quality / effectiveness	Efficiency of resource mobilization and utilization	Equity and access
Knowledge creation and innovation	Development relevance and Responsiveness	Delivery capacity and management	Efficiency of resource mobilization and utilization	Quality / effectiveness	
Capacity Development	Delivery capacity and management	Quality / effectiveness	Development relevance and Responsiveness	Efficiency of resource mobilization and utilization	Equity and access

SUMMARY PROGRAMME DESCRIPTION

26. As noted above, ETSIP covers all sub-sectors. The following section provides a comprehensive list of priority components that will comprise the content of each of the sub-programmes that make the first phase of ETSIP; not in order of strategic priority. Only those strategic objectives in the 15-year ETSIP Strategic Plan which will be covered in the first phase of implementation are listed. Also included are critical cross cutting issues that will be mainstreamed into the key sub-programmes. These themes include ICTs, HIV and AIDS, and Capacity Development. However, HIV and AIDS has two dimensions, i.e. as a stand-alone sub-component and as a mainstreaming issue.

Early Childhood Development (ECD) and Pre-Primary Education

Strategic Objective A: Improving management of, delivery systems for, quality of and access to, early childhood development programmes

Component 1: Enhancing early childhood education management systems, quality and access

Strategic Objective B: Improving management of, delivery systems for, quality of and access to, pre-primary education programmes

Component 2: Establishing the management framework for pre-primary education

Component 3: Developing pre-primary teacher support and materials development

General Education

Strategic Objective A: Improve system quality and relevance

Component 1: Learning standards and curricula development

Component 2: Teacher development (see tertiary education for pre-service)

Component 3: Textbooks, books and materials

Component 4: Learner assessment

Strategic Objective B: Ensure equality of educational opportunity

Component 5: Pro-poor expansion of access to senior secondary education

Component 6: Equitable (pro-poor) distribution of resources

Strategic Objective A and E: Improve management accountability and system efficiency

Component 7: Build management competencies and accountability

Component 8: Improve efficiency in use of resources

Component 9: HIV and AIDS related mainstream activities

Vocational Education and Training (VET)

Strategic Objective A: Strengthen the management capacity of the vet system

Component 1: Establish the Namibia Training Authority (NTA)

Component 2: Enhance management development at Vocational Training Centres (VTCs)

Strategic Objective B: Improve the quality of VET

Component 3: Establish competency-based training (CBET)

Component 4: Upgrade instructor qualifications and expand outputs

Component 5: Re-equip VTCs

Strategic Objective C: Mobilise Resources for training and use them efficiently

Component 6: Establish the levy system

Strategic Objective E: Expand VET outputs to meet labour market demands

Component 7: Diversify and expand training provision

Tertiary Education and Training

Strategic Objective A: Strengthen institutional capacity of tertiary education

Component 1: Develop the NCHE

Component 2: Implement the Teachers' Education Colleges Act

Strategic Objective B: Enhance Relevance and Responsiveness of tertiary education

Component 3: Develop and operationalise the teacher education reform programme

Component 4: Build capacity for graduate studies and research

Strategic Objective C: Improve the quality of tertiary education and training system

Component 5: Develop pre-entry, foundation programmes and student support

Component 6: Improve the effectiveness and productivity of academic staff

Component 7: Introduce quality assurance systems

Strategic Objective E: Mobilise financial resources and use them efficiently

Component 8: Diversify financing sources

Component 9: Efficient resource use

Knowledge Creation and Innovation

Strategic Objective: ***Create and sustain a productive national knowledge and innovation system (NKIS)***

Component 1: Strengthen capacity for the effective coordination of the NKIS

Component 2: Establish the policy and legal environment to support knowledge and innovation

Component 3: Strengthen effective demand for knowledge and innovation

Information, Adult and Lifelong Learning

Strategic objective A: Ensure that (IALL) adult and lifelong learning and information service sector programmes are relevant and responsive to the needs of a learning society

Component 1: Strengthen the policy and legal framework for information and lifelong learning

Strategic objectives B, C and E: Expand equitable access to quality information and lifelong learning programmes

Component 2: Improve equity and access to high quality lifelong learning opportunities

Component 3: Improve and strengthen equitable access to information and learning resources

Strategic objective E: Strengthen all information institutions

Component 4: Quality and effectiveness of knowledge management systems

Information Communication Technology (ICT) in Education

Strategic Objective: Mainstream ICTs into the education system

Component 1: Review and develop curriculum and content

Component 2: Review, develop and implement training model

Component 3: Develop and deploy ICT services and infrastructure

Component 4: Strengthen education management through the use of ICT

Component 5: Monitoring and evaluation

HIV and AIDS

Strategic Objective: Improve system response to the impact of HIV/AIDS

Component 1: Awareness raising and empowerment

Component 2: Mainstreaming HIV and AIDS

Component 3: Strengthening Regulatory Frameworks

Component 4: Meeting the needs OVC

Component 5: Managing the HIV and AIDS response

Capacity Development

Strategic Objective: Improve the capacity of MoE to manage service delivery, as well as discrete projects and programmes (with particular attention to ETSIP)

Component 1: Rationalising the division of labour in the sector and restructuring the MoE

Component 2: Strengthening leadership in the education sector and the MoE

Component 3: Strengthening general management at all levels in the MoE

Component 4: Improving the management of human resources

Component 5: Improving the management of physical resources

Component 6: Improving the management of information and knowledge

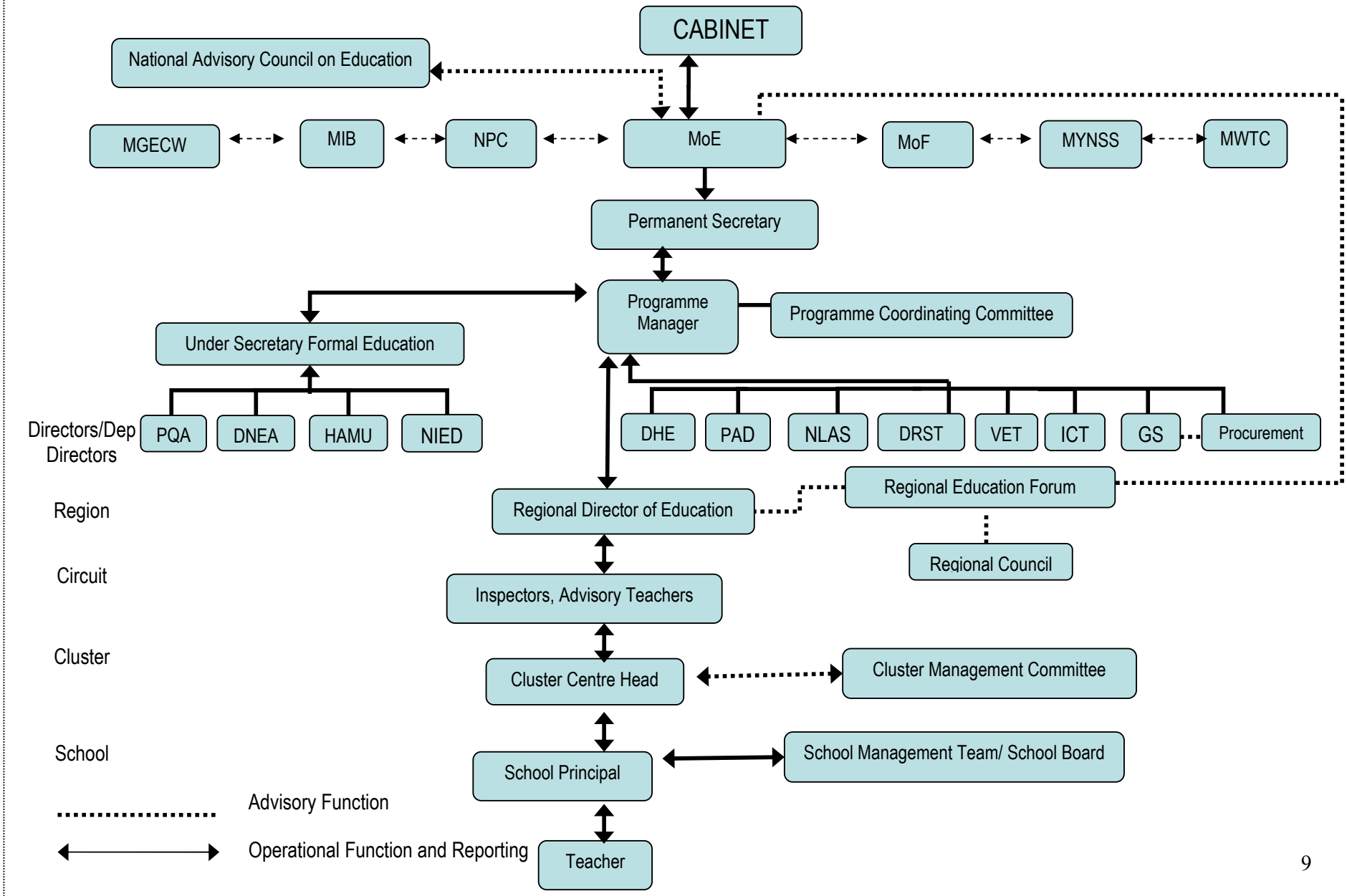
Component 7: Advocacy

Component 8: Funds mobilisation, development of partner coordination and management of assistance

Component 9: Capacity Building and procurement

IMPLEMENTATION ARRANGEMENTS

27. The education sector ministries have articulated arrangements that will ensure an effective implementation of ETSIP and effective service delivery. A Programme Manger was assigned in January 2006. The arrangements are summarised below:


CABINET
National Advisory Council on Education
MGECW
MIB
NPC
MoE
MoF
MYNSS
MWTC
Permanent Secretary
Programme Manager
Programme Coordinating Committee
Under Secretary Formal Education
Directors/Dep Directors
PQA
DNEA
HAMU
NIED
DHE
PAD
NLAS
DRST
VET
ICT
GS
Procurement
Region
Regional Director of Education
Regional Education Forum
Regional Council
Circuit
Inspectors, Advisory Teachers
Cluster
Cluster Centre Head
Cluster Management Committee
School
School Principal
School Management Team/ School Board
Teacher
Advisory Function
Operational Function and Reporting

COST IMPLICATIONS AND RESOURCE MOBILISATION

26. Comprehensive costing of the first phase of ETSIP shows that the total cost of implementing ETSIP will be N$2.4 billion in the first five-year phase. The table below summarises the projected revenue and expenditure for ETSIP activities, divided between years and ETSIP sub-programmes.

Projected revenue and expenditure for ETSIP activities for the first phase of ETSIP implementation (2006/07 – 2010/11)

	N$ millions	2006/7	2007/8	2008/9	2009/10	2010/11	2006/7 to 2010/11
	Expenditure						
A	**Total cost of additional expenditure for ETSIP activities**	**105.21**	**342.69**	**597.24**	**676.86**	**677.77**	**2,399.76**
	ECD/PP	1.71	8.40	14.83	10.05	11.84	46.83
	General Education	51.40	187.35	352.92	436.46	422.66	1,450.79
	Tertiary Education and Training	1.60	20.99	26.29	22.61	19.70	91.18
	VET	12.90	22.92	66.23	56.13	81.72	239.91
	ICT	19.39	63.23	79.32	89.40	93.32	344.67
	HIV/Aids	10.95	10.98	7.47	7.96	8.23	45.59
	IALL	5.50	18.78	36.18	36.06	22.56	119.09
	Capacity Development	1.31	5.56	4.89	10.54	9.83	32.13
	Knowledge and Innovation	0.44	4.48	9.11	7.63	7.91	29.56
	Revenue						
B	**GRN contribution**	**100.00**	**100.00**	**100.00**	**0.00**	**0.00**	**300.00**
C	**Pledges made at the Round Table: International Development Partners ***	**107.02**	**180.80**	**109.54**	**42.68**	**21.82**	**461.86**
D	**Pledges made at the Round Table: Private Namibian Development Partners ***	**0.82**	**5.39**	**5.20**	**5.20**	**4.75**	**21.35**
E	**Total pledged financial support for ETSIP (B+C+D)**	**207.84**	**286.19**	**214.74**	**47.88**	**26.57**	**783.21**
F	**Financial shortfall/surplus for all ETSIP activities, accounting for both Round Table and GRN contributions (E-A)*****	**102.63**	**-56.50**	**-382.50**	**-628.98**	**-651.20**	**-1,616.55**
G	**Total of additional financial contributions under discussion****	**0.00**	**119.35**	**382.48**	**591.55**	**613.83**	**1,707.21**
H	**Financial shortfall/surplus for all ETSIP activities, accounting for both Round Table, GRN and contributions under discussion (E+G-A)*****, ******	**102.6**	**62.8**	**0.0**	**-37.4**	**-37.4**	**90.7**
I	**Development Partner funds through the SRF MTEF 2007/08-2009/10**		**167.0**	**227.0**	**279.5**		

* A negative number indicates a shortfall and a positive number indicates a surplus

** The apparent annual surpluses are caused by the lack of full alignment between funding outside the State Revenue Fund & the planned activities of ETSIP.

27. The Ministry of Education has successfully secured funding for ETSIP activities from a wide range of sources. In 2005, the Ministry of Education started a fund-raising drive for ETSIP with a mini Round Table. A larger and more successful Round Table Pledging Conference followed this in April, 2006. The event was well attended by a range of International and Namibian Development Partners who pledged generously to ETSIP. Beyond the Round Tables, the Ministry of Education has been involved in further discussions and proposals for future funding for ETSIP, which are still under development and negotiation. The most financially significant is the sectoral proposal to the Millennium Challenge Account. These commitments are all in addition to GRN financial support, of N$300 million, for ETSIP over the MTEF period of 2006/07-08/09.

EARLY CHILDHOOD DEVELOPMENT AND PRE-PRIMARY EDUCATION [N$41.1 million]

Background

1. Early Childhood Development (ECD) and pre-primary education are widely recognised as having a significant impact on the subsequent performance of children in basic education programmes. They lay the foundations for acquiring basic literacy and numeracy skills, they considerably reduce dropout and repetition rates and, well managed, they generate a predisposition of the child towards learning and attending school. (The repetition rate in grade 1 was 18.8% and the dropout rate 4.2% in 2005, higher than any comparable SADC country). Pre-primary education would ensure a smooth transition between ECD and primary education and lay the foundation for lifelong learning. ECD and pre-primary education are much sought on behalf of their children by parents who themselves are literate and value them and can afford them. The challenge in Namibia is to ensure they are also available to the less advantaged communities most in need of them.

Achievements

2. Namibia has a progressive ECD policy in place that reflects its commitment to promoting a multi-sectoral community-based approach to early childhood development and care involving parents, the family and their community organisations, although its resource base is still in need of clarification. Access to ECD facilities has improved since independence, under the guidance of various Ministries, of late the Directorate of Community and Early Childhood Development (DCECD) in the Ministry of Gender Equality and Child Welfare (MGECW) and the 2001 census data showed 32% of children between the ages of 3 and 6 enrolled in some form of ECD programme. An institutional framework governing and facilitating services to young children has been established and is evolving. Under this framework, the intention is that ECD centres will be registered and monitored, and caregivers will be provided with practical support in the form of simple guidelines on the management of centres and a manual covering various ECD topics. Together with NGOs the government has piloted a number of new approaches including home-based programmes. The National Institute for Educational Development (NIED) has developed a 12-week training programme for caregivers, currently under training for piloting in 2006. A 10-week school readiness programme was developed by the Ministry of Education in 1994 as part of the grade 1 school curriculum.

Challenges

3. *Improving management of, delivery systems for, quality of and access to, pre-primary programmes:* The first challenge in improving the management and delivery of pre-primary education is to establish a new policy and institutional framework within the Ministry of Education to manage pre-primary education effectively. This has as its ultimate goal for 2030 the establishment of a pre-primary year in primary schools for all children aged 5/6 years, to be developed first of all in the schools serving the poorest populations and OVCs. Secondly, the needs of the existing system must be reviewed and a coherent capacity development programme should be developed and implemented to improve the quality of teaching in existing schools, to allow for children reaching grade one with little or no prior ECD experience, or for children living in difficult circumstances. A pre-primary programme, based on an expanded version of the existing school readiness curriculum, should be developed together with an emergency training package. Norms and standards should be developed against which the performance of existing institutions and teachers can be evaluated and improved, using EMIS and tracking systems to measure the progress of the most vulnerable children. Thirdly, the capacity to deliver pre-primary has to be increased, in the first instance through tapping the existing pool of ECD staff through

recruitment and in-service training to meet the required standards, and through appropriate remuneration, and subsequently, through attracting new recruits from vocational and teacher-training , and the establishment of a pre-primary career structure. In addition, infrastructure support necessary to provide curriculum revision and materials development as the system progresses. A parallel programme of classroom construction should be developed as money becomes available.

Priority components

Strategic Objective A: Improving management of, delivery systems for, quality of and access to, early childhood development programmes

Component 1: Enhancing early childhood education management systems, quality and access

Strategic Objective B: Improving management of, delivery systems for, quality of and access to, pre-primary education programmes

Component 2: Establishing the management framework for pre-primary education

Component 3: Developing pre-primary teacher support and materials development

4. There are three components to this programme. The first seeks to improve the current structures for managing early childhood care and to enhance both access and quality. The second will establish the necessary policy, management and support framework within the Ministry of Education to manage the expansion of pre-primary education. The third is to address quality issues in pre-primary education through teacher development and the development of the curriculum and appropriate materials and the measurement of children's progress through EMIS and individual tracking of children in difficult circumstances. All three components will have a short and a medium term element in order to address the immediate needs of existing centres, and to lay the foundations for the longer term goals of Vision 2030. These components will be directed at supporting those children in greatest need.

Component Descriptions

Component 1. Enhancing early childhood education management systems, quality and access [N$16.9 million]

5. *Challenges:* A national ECD policy exists but there are no effective plans or institutional framework or resource allocations for promoting ECD adequately. Although there has been a rapid growth in ECD provision, the care offered tends to be of poor quality with no professional standards, few training opportunities and lack of recognition of ECD as an occupation. Access to ECD has increased, but generally the poorest children receive the poorest quality services. Poverty is widespread, and there are increasing numbers of children living in difficult circumstances. Two categories of children identified as having particular needs not currently addressed are orphans and vulnerable children (OVCs), and children from marginalised groups such as the San, the Ovahimba and the Riemsvasmaker communities.

6. *Objectives***:** The existing policy, legal, institutional and resource framework for the delivery of ECD programmes is improved, and monitoring systems introduced to enable efficient data collection for planning and resource allocation. A sub-sector Education Management Information System (EMIS) is in place. The competencies of ECD caregivers are improved. More equitable access to ECD programmes is available, particularly for OVCs and marginalised groups, through the development of a subsidy system.

7. *Component description*: The revised ECD Policy document, with resource allocations and implementation plans more fully developed, will be finalised, and an executive summary sheet will be translated into selected languages, disseminated and operationalised. A broadly representative National ECD Committee with regional sub-structures will be established. A main task for regional and national ECD committees will be to receive reports and scrutinize monitoring data about the uptake and impact of local developments on the poorest children.. A

subsidy system to support the poorest children in ECD will be developed.

8. The capacity of current staff within MGECW to deliver the above will be developed through job specialization. Currently community liaison officers undertake a variety of tasks including the delivery of ECD, but these tasks are not clearly defined and with one exception, the budget for ECD is not disaggregated from the general community budget, making monitoring of expenditure and effectiveness difficult to assess. Training will be provided for those allocated a specific ECD role, including monitoring responsibilities. Additional management training will be developed for senior staff.

9. The 12-week basic ECD caregivers' syllabus and the parental education manual, which have been developed in 2005, will be piloted, disseminated and introduced with appropriate training In addition to the above, norms and standards for appropriate delivery of ECD programmes will be developed. Data collection processes will be devised in line with the sector-wide EMIS. A basic ECD monitoring and evaluation strategy will be developed. Competencies and standards for effective ECD caregivers will be defined. An advanced curriculum for ECD caregivers and a specialist package of training materials for OVCs will be developed, disseminated and implemented with appropriate training.

10. The 12-week basic ECD caregivers' syllabus, the advanced curriculum for ECD caregivers and the specialist package for OVCs will be translated into the various local languages and widely disseminated. The existing advocacy materials on ECD will be made available in different local languages and distributed across the country. Subsidies in the form of technical and material support will be provided to ECD programmes that show that they can support children living in difficult circumstances.

11. *Implementation*: Contingent on 8 above, ECD policy development and planning issues will be undertaken under the direction of the Directorate of Community and Early Childhood Development (DCECD) with assistance from UNICEF in 2005-6. Capacity building for newly allocated ECD jobs within the MGECW will be delivered. Norms and standards for caregivers will be developed by DCECD during 2006-7. Subsequent biannual training events will be offered by DCECD with NGO assistance. The national and regional management ECD structures will be operational from 2005 and the EMIS and monitoring systems will be in place by 2007. These new structures will have as a primary task the scrutiny of EMIS and other monitoring data.

12. Specialised training materials targeted at OVCs will be developed (2007) and implemented with appropriate training by 2008. The needs assessment of marginalised groups will be undertaken in 2006 and appropriate educational materials developed by 2008.

13. *Outputs and indicators*: The key outputs of this component related to management and delivery systems are (a) a revised national ECD policy, reinforcing the need to support the poorest children and children living in difficult circumstances through its resourcing proposals; an executive summary of the policy will be available in selected languages nationwide; (b) a national costed ECD strategic plan anchored in the policy; (c) norms and standards for appropriate ECD delivery; (d) an assessment of MGECW ECD delivery and management capacity; (e) training programmes for ECD managers and caregivers operationalised (f) a national and regional structure for ECD management; (g) EMIS ECD data collection processes established; and (h) monitoring and evaluation tools operational.

14. Key outputs related to quality and access are: (a) standards and curricula for caregivers; (b) an operational training programme for caregivers (c) specialised training materials targeting OVCs; (d) educational packages targeting marginalised groups in use and (e) ECD support for OVCs implemented.

Component 2. Establishing the management framework for pre-primary education [N$10.5 million]

15. *Challenges*: The responsibility for pre-primary education will move from MGECW to MoE in 2006, the long-term intention being to establish pre-primary classes in primary schools. Currently, no structures of staff exist to support such a development. As a first priority, staff must be allocated to it, centrally (NIED) and regionally. Appropriate structures and policies must be developed, and the possibility of attaching pre-primary classes to existing schools needs to be urgently explored. At present ECD centres may include a notional pre-primary group, but access to good quality, pre-primary schooling is mainly limited to wealthier parents who can afford the fees to pay qualified teachers, further exacerbating inequalities. In general, expansion of pre-primary classes will target poor communities. Particular categories of children identified as having needs not currently addressed are OVCs, and children from marginalised groups such as the San, the Ovahimba and the Riemsvasmaker communities and disabled children.

16. *Objectives***.** The legal and institutional framework for the delivery of pre-primary programmes are improved and further aligned to the school system. Posts are created at NIED and regionally to manage and support the delivery of the pre-primary programme. The existing school readiness programme is updated and brought in line with the new framework to allow learners to acquire requisite levels of school readiness. Access for poorer and marginalised children to pre-primary classes is improved through having trained pre-primary teachers on the government payroll. A career path for pre-primary educators is established. The capacity of institutions to deliver pre-primary programmes is enhanced and community participation on their governance strengthened. A longer term programme of curriculum revision and associated materials development is under way. A sub-sector EMIS is in place and a tracking system is introduced for Grade 1 primary children to measure their progress. Revised norms and standards for pre-primary education are in place and operationalised.

17. *Component description*: Existing policies and structures for the support of increased access to pre-primary education will be reviewed and revised and new ones, made necessary by the move of the locus of responsibility from MGECW to MoE, developed and operationalised. A staff of 14, one per region and one central, will be identified to spearhead and manage the process (see also component 3). They will be assigned prior to the formalisation of posts. A career path for pre-primary educators will be established. A pre-primary programme, based on the existing school readiness curriculum, for the implementation and enhancement of pre-school education will be developed. Data collection procedures will be developed in line with the sector-wide EMIS and existing child tracking systems.

18. Expansion of access in the first phase will be limited to a pro-poor programme, in particular addressing the needs of OVCs (see component 2 in the HIV and AIDS sub-programme) and marginalised groups (assisted by NAMAS).

19. Existing norms and standards will be reviewed and revised. The current delivery capacity for pre-primary programmes will be assessed and a programme developed to assist existing schools in meeting the standards. Where this is impossible, for reasons of space or lack of capacity or lack of local access, existing school sites will be explored Community participation in pre-school management will be enhanced.

20. *Implementation*: Interim national and regional structures for managing pre-primary education will be fully operational from 2006/7. Permanent structures for pre-primary education management, with the capacity to further expand to meet need and demand will be fully operational from 2009. A revised pre-primary curriculum and associated teaching and learning materials and training packages will be available by 2008, addressing the issues of HIV and Aids (see component 1: Curriculum and Teaching in the HIV and AIDS sub-programme). Pre-primary policy development and planning issues, including the identification of sites for pre-primary classes for poor children and children in difficult circumstances (particularly for OVCs, those infected and

affected by HIV and marginalised groups) will be undertaken in consultation with MGECW, under the direction of PAD, PQA and NIED in 2006-8. In order to recruit and retain staff to work in new or existing pre-primary sites norms and standards and career paths for pre-primary teachers will be developed during 2007-9. EMIS and monitoring systems will be in place by 2008. Community participation in the governance of pre-primary education will be strengthened in 2009. A detailed and costed plan for the long-term expansion of the system will be available by 2011, identifying how the goal of pre-primary classes for all children can be achieved, in line with *Vision 2030*.

21. *Outputs and indicators*: The key outputs of this component related to management and delivery systems are (a) a structure within the Ministry of Education for delivering the pre-primary programme; (b) a school readiness curriculum and indicators developed and in use; (c) norms and standards for appropriate pre-primary delivery including basic competencies of pre-primary teachers; (d) an assessment of pre-primary delivery and management capacity; (e) EMIS data collection processes established to monitor the increased access of poor children (particularly for OVCs, those infected and affected by HIV and marginalised groups) to pre-primary classes; and (f) well advanced plans for the future evolution of pre-primary education, including a fully revised curriculum, classroom construction and provision of the necessary resources.

Component 3. Developing pre-primary teacher support and materials development [N$13.9 million]

22. *Challenges*: In the short-term, a revised and expanded version of the existing school-readiness programme will be implemented. An emergency training package with relevant teaching and learning materials must be developed, targeting the training and remuneration of 300 teachers in marginalised communities, including existing pre-primary teachers/caregivers and a cadre of promising grade 12 school leavers. A major difficulty is poor or inappropriate sites for pre-primary classes in marginalised communities. For an interim measure afternoon sessions at existing school sites may be considered, but eventually additional classrooms will have to be erected to house pre-primary classes. Mobile teacher packs will have to be developed for mobile communities. In the longer term, teacher education support programmes and formalised structures for pre-primary educators must be developed and curricula and teaching and learning materials must be revised. Quality pre-primary delivery must result in better literacy and numeracy levels in primary schools.

23. *Objectives*: Pre-primary management capacity is enhanced. Expanded and more equitable access to pre-primary programmes is available for poor children, particularly for OVCs, those infected and affected by HIV and AIDS and marginalised groups through the development of specialised support materials. Primary school readiness is enhanced as are the competencies of pre-primary teachers, providing a smooth transition between ECD and primary education and laying the foundation for lifelong learning. Learner achievements and shortcomings are tracked and analysed to inform curriculum review. BETD Preset and Inset programmes are developed to cater for student teachers opting to specialise in pre-primary education.

24. *Component description*: An emergency in-service training package will be developed and implemented by a combination of face-to-face and distance modes for 300 pre-primary teachers, 100 per year, commencing in marginalised communities and including OVCs and children with special needs. The quality of children's school readiness level will be improved through the development of a comprehensive package of teaching and learning materials which will be provided to the trained teachers and through site-based teacher

support.

25. The 300 trained teachers will be supported through the provision of fixed allowances, thus removing the need for poorer parents to pay high fees to employ such staff. School readiness levels will further be improved through the translation of the school readiness programme and the package of teaching and learning materials in 10 African languages. Aptitude testing materials will be developed, amended and piloted. Minimum entry requirements and performance-based salaries for pre-primary educators will be established. A teacher training curriculum will be developed as part of the BETD pre-service and in-service programmes.

26. *Implementation*: The 14 assigned staff members (see component 2) will spend the most part of the first year centrally at NIED, developing a revised and expanded version of the existing school-readiness programme and an emergency training package, including a teachers' guide, training manual and a set of basic teaching and learning materials. In 2008 they will then co-ordinate in-service training of 100 pre-primary teachers at regional level, by a combination of face-to-face and distance modes in a pro-poor sequence. The permanent staff will take over this role in 2009/10. Study tours will be arranged to broaden the experience of pre-primary staff members (2007-2010) and staff members will be supported in enrolling into distance study programmes within the pre-primary field. A mechanism will be developed that permits the remuneration of trained teachers by the government prior to the development of a coherent pre-primary employment structure. A fully articulated sequence of professional development programmes will be developed for pre-primary teachers as an element of Tertiary Education Component 3 and delivery mechanisms will be defined and operationalised in 2010/11. An effective tracking system and aptitude testing instruments for learners will be in operation from 2010.

27. *Outputs and indicators*: Key outputs are (a) basic competencies for pre-primary teachers defined; (b); an emergency training programme for pre-primary teachers developed and implemented (c) 300 pre-primary teachers meeting the defined basic competencies; (d) minimum entry requirements and performance-based salaries for pre-primary educators will be established (e) a package of translated teaching, learning and aptitude testing materials developed and in use; (f) pre-primary curriculum developed for the BETD Preset and Inset programmes, and (g) trained pre-primary teachers in recognised institutions receiving a fixed allowance (h) a demonstrable number of poor children (particularly for OVCs, those infected and affected by HIV and Aids and marginalised groups) doing better in primary school.

GENERAL EDUCATION [N$1 450.8 million]

Background

1. General education is the most important education that the vast majority of the youth will receive for the foreseeable future, and must provide the foundation for lifelong learning. Good quality formal general education (grades 1-12), as well as non-formal delivery modes, build the foundation skills required for (a) employment of trainable people who can adapt to labour market changes; (b) increase capacity intake to VET for the development of skilled workers, and (c) increased numbers of school leavers who can enter tertiary levels of the education and training system. The existing bursary scheme will be used to attract prospective teachers for Mathematics and Sciences and other graduates who would join as vocational instructors as well as Mathematics and Science teachers in secondary schools. In this context it supplies teachers for the future. In fact, the quality of general education plays a large part in determining the quality of tertiary education, and is essential for an effective functioning KBE in realisation of Vision 2030. It is the entry point for developing a self-educable learning society to which Namibia aspires.

2. General secondary education is an essential foundation for the human resources required to build a sustainable competitive economy. In an information age with globalisation of markets, secondary education develops and reinforces the capacity for continuous learning and flexible skill training. National competitiveness and international co-operation, especially in high value added economic activity, depend on knowledge, skills and competencies associated with abstract reasoning, analysis, language and communication skills, and the applications of science and technology. There is much evidence to suggest that export-led growth is associated with investments at post-primary levels.

3. In terms of social goals, broad access and equity are best addressed through general education. General education provides an effective vehicle to ensure that important social messages, e.g. HIV and AIDS information are learned. Secondary education, in particular, has many positive externalities, such as improved health, reduced infant mortality and better family planning, HIV and AIDS prevention, and enhanced social participation. More and better secondary education for girls contributes directly to the empowerment of women.

4. In short, general education is the key foundation for building the skills required for Namibia's accelerated development and for achieving vital social goals.

Achievements

5. Namibia has developed an improved education sector from the weak and inequitable system it inherited from South African rule. The Net Enrolment Ratio for grades 1 to 9 is 96.4%. The enrolment ratio in senior secondary is about 55.0%. Gender balance has been achieved at all levels of the system though not in all regions. The survival rate to grade 7 is about 77% of the age group and 55% to grade 10. There has also been a strong growth in the number of qualified teachers in the school system. About 83.5% of teachers in secondary education and 55.6% of teachers in primary schools have pedagogical training, up from 39% and 13%, respectively, in 1995. Such teachers possess grade 12 plus three years of professional training, namely the Basic Education Teacher Diploma (BETD). NIED established curricula in the early 1990s reflecting a learner-centred philosophy. All these curricula have now been substantially reviewed in the light of experience. Since independence there has been strong political commitment by government to improve primary and secondary education. This is evident of the pivotal role education is geared to play in the realisation of Vision 2030. Education is expected to play a central role in accelerating economic growth and social development. To do this government has provided a strong resource base for education, including up to 23.34% of total public spending and 7.5% of GDP. The delivery points in education have been decentralised to the thirteen education regions of the country. Administration and the management of education, which includes over 70% of

budget implementation, is the responsibility of the regional directors. They are also responsible for capital budget monitoring and data collection for EMIS. The administration of schools is decentralised to circuit level, to cluster level and to school level through school boards. Various policies such as for HIV and AIDS and for ICT have been formulated for implementation. National standards for schools and teachers have also recently been finalised.

Challenges

6. *Quality*. Namibia must get much better returns for its considerable investment in education. The current system of general education is inadequate to effectively support development goals, including a transition to a KBE. Most children leave school without the foundation skills and competencies they ought to have acquired. For example, functional literacy rates are low among grade 6 and even grade 10 graduates. Namibia has ranked the lowest of any country in the SACMEQ test in mathematics and English reading at the primary level. Poor learning at primary level carries over to higher levels, especially in mathematics and science. The main challenge is to raise sharply the pervasively low quality of learning achievements. This means raising the foundation of quality Early Childhood Development (ECD), adequate allocation of funds for quality enhancing inputs (standards and curricula, teacher development, textbooks and learner assessment), rationalising the curriculum at upper levels, raising teacher competencies, and improving school management and accountability for results. Parents need to be more involved in the education of their children.

7. *Access and equity*. Disadvantaged groups have inadequate access both to inputs and outputs (learning achievements). Inequalities are most evident in the distribution of resource inputs and learning outcomes. These inequalities render the education system a weak instrument for facilitating poverty eradication and for reducing social inequalities. They represent a failure to realise the productive potential of a large proportion of the population. Learning outcomes are inequitably distributed to the disfavour of learners in the previously disadvantaged northern regions. Only 43% of the grade 10 graduates from the northern regions qualified for entry into senior secondary schools on national examinations compared with over 46% in the rest of the country. This low achievement translates into under-representation of these regions at the tertiary level. Inequalities in learning outcomes mirror major disparities in the distribution of resource inputs. Overall, schools in the northern regions, (Caprivi, Kavango, Kunene, Oshana, Ohangwena, Omusati and Oshikoto) have lower physical, human and financial resources. The current input-based system of allocating financial resources discriminates against under-resourced schools.

8. *Inadequate outputs*. A pressing challenge for Namibia is to break the bottleneck of inadequate outputs at senior secondary level. Shortage of skilled labour acts as one of the most significant brakes to economic growth. It limits the capacity to apply knowledge and technology in production, constrains productivity growth and hampers Namibia's international competitiveness. The most significant cause of the shortage is that general education fails to provide the quantity and quality of output required to provide a base for higher level human capital development, especially at the senior secondary level. The most notable way to address skills shortage is to improve the quality and quantity of the throughput of the general education system.

9. *Inefficient use of resources*. The poor quality of education is a major factor in explaining low internal efficiency, as manifest in high learner repetition and dropout rates. Wastage within the system undermines the goal of rapidly developing an inclusive knowledge society, but also the goal to quickly reach a threshold of highly educated and skilled labour. Existing resources are also used inefficiently, as indicated by low class sizes and average learner-teacher ratios. These inefficiencies deprive the system of savings that could be invested in expansion of access and improvement of quality. General education must increase its throughput and completion rates of learners, as well as reduce the recurrent and capital costs per learner through more intensive use of teachers and facilities. Improved investment in quality and efficiency will raise substantially the returns on investment in the system.

Priorities

10. All requirements cannot be addressed at once. Therefore, the first phase of ETSIP includes a selection of top priority components. During the first phase the general education sub-programme will focus on three strategic objectives: (a) the improvement of education quality; (b) ensuring equality of opportunity, including equitable access to quality senior secondary education; and (c) improving system management and efficiency.

Priority Components

Strategic Objective A: Improve System Quality and Relevance

Component 1: Learning standards and curricula development
Component 2: Teacher development (see tertiary education for pre-service)
Component 3: Textbooks, books and materials
Component 4: Learner assessment

Strategic Objective B, D, F and G: Ensure Equality of Educational Opportunity

Component 5: Pro poor expansion of access to senior secondary education
Component 6: Equitable (pro-poor) distribution of resources

Strategic Objective A, C and E: Improve Management Accountability and System Efficiency

Component 7: Building management competencies and accountability
Component 8: Improve efficiency in use of resources
Component 9: HIV and AIDS related mainstream activities

(Note: Only some of the activities in the mentioned strategic objectives of the 15-year ETSIP Strategic Plan will be covered in the first phase of implementation. The others will be dealt with in subsequent phases.)

Component Descriptions

Component 1. Learning standards and curricula [N$35.7 million]

11. *Challenges:* Until recently, curricula were subject based, not based on core competencies to be mastered by learners. The challenge is to develop and set quantifiable targets for learning achievements in general education based on measurable skills, knowledge and competencies to be acquired by learners. This is the first step to enhancing learning achievements. To the extent possible, these learning targets should be set for core learning areas at all levels, be benchmarked to international standards, and have learning targets set for every school. Revised norms and standards should be used as a basis for revising norms and standards for schools. The learning norms can then be used as a basis for revision of curricula.

12. *Objective:* The ultimate objective is improved and more relevant learning outcomes in primary and secondary education. More specifically, it is that a relevant, sustainable and balanced Namibian school curriculum is in place that contains, assesses and monitors the transfer of competencies required for effective functioning in a Knowledge Based Economy. In this context, the component aims at a substantial increase in high quality senior secondary throughput as a base for developing the human capital required for a KBE.

13. *Component Description*: The component involves two processes - definition of core competencies and revision of curricula. The first activity is to define the core learner knowledge, skills and competencies to be acquired at each phase of the system, ensuring relevance to the inclusion of competencies for a KBE. This activity has already been completed for grades 1-4. During ETSIP implementation the work will be continued and extended to cover grades 5-12. Secondly, school curricula will be revised to reflect the identified competencies, skills, standards and targets. This

will involve mainstreaming ICTs in primary and secondary education, strengthening English, mathematics, natural sciences, entrepreneurship and arts in education, finalising syllabuses for design and technology in grades 5-12; evaluating and including coverage of HIV and AIDS & Life Skills; and publishing guidelines of environmental learning. At senior secondary level, the number of subjects has been further rationalised to make it more relevant and cost-effective. All inputs will be consolidated into a new curriculum document for Basic Education, replacing the former Pilot Curriculum. Finally, a review will be done of curriculum review processes with a view to make them more flexible, revise criteria for selection of members of curriculum panels, provide incentives for master teachers to participate and develop critical skills among assessment personnel.

14. *Implementation*: NIED

15. *Outputs and Indicators:* (a) Skills and competencies identified, defined and documented for each phase by 2006; (b) Revised curriculum to include content relevant to a KBE, including mainstreamed ICTs, mainstreamed entrepreneurship as from upper primary onwards, environmental education, arts, human rights and democracy, gender, HIV and AIDS and Life Skills in the curriculum framework by 2006, approved by National Examination, Assessment and Certification Board (NEACB) and issued in 2007, and updated periodically thereafter; (c) a master curriculum document for Basic Education adopted, 2008; and (d) curriculum development processes revised, strengthened and streamlined by 2010.

Component 2. Teacher professional development and incentives [N$18.7 million]

16. *Challenges*: Substantial progress has been made in increasing the proportion of qualified teachers in general education, including from just 17% in 1995 to 55.6% at primary level, and from 39% to 83.5% at present at secondary level. Improvements in teacher qualifications have not yet translated into effective teacher quality and effective teaching. Still, about 45% of primary and 16.5% of secondary teachers are not formally qualified for their teaching. Even those who are formally qualified still lack competencies critical to improved student learning, including English (which is the medium of instruction from grade 4 onwards), mathematics and science. Many teachers have difficulties interpreting and implementing the curriculum.

17. *Objective*: (a) Teacher competencies strengthened in subject mastery and pedagogical skills; (b) survey on the effectiveness of clusters carried out, cluster system policy developed and implemented; clusters utilised effectively for in-service training and support for teacher development; (c) Advisory teachers equipped and empowered with the necessary tools and skills to enable teachers to develop expertise, skills and positive attitudes to stimulate teaching and learning; (d) Incentives system (including housing scheme in rural areas) implemented for improved teacher performance and appraisal; and (e) The inspectorate reviewed and roles clearly defined in line with the established National Standards for schools and teachers to enable them to support, monitor and evaluate schools efficiently (see Component 7); and (f) Establish licensing system for teachers, linked to teacher competency standards, performance appraisal and incentive system.

18. *Component Description:* The main delivery mechanism for in-service teacher development will be a reformed and strengthened cluster system of schools which presently involves 250 schools serving as cluster centres. A national policy on the cluster system has been drafted and will be finalised in 2006. Roles of cluster principals and subject facilitators are formulated in the policy and incentives worked out in line with responsibility. The cluster centres will be upgraded through (a) the provision of teaching and learning resources/facilities (based on an establishment of norms and standards and a survey of existing facilities); (b) development and implementation of a training programme for 1320 satellite school principals, 250 cluster centre principals, 300 subject facilitators and 2000 teachers; (c) development of a training manual for centre and satellite school principals; (d) development of a monitoring system for cluster activities; and (e) a management performance system for learning outcomes.

19. The first step towards improved teacher performance is to define the competencies required and develop teacher standards. (See also Component 3 in Tertiary Education.) A second step is to implement the currently planned system of teacher licensing. Finally, incentives of various kinds will be developed within the means available.

20. Cluster centres will be supported by improvements in the quality of the teacher advisory services. The professional capacity of advisory teachers will be strengthened through training based on a needs assessment. Training will be conducted at regional workshops on curricula implementation and cross-cutting issues such as HIV and AIDS and Life Skills, as well as through annual planning workshops and annual review workshops.

21. Teacher performance will be enhanced through specific facilitators training workshops in subject areas of need. In addition training will be provided to teachers in special education/inclusive education and compensatory teaching to provide quality education to learners, including marginalized children in rural areas. Accountabilities will be developed through the following means: (a) development and implementation of a teacher performance appraisal system; (b) setting and monitoring performance targets for teachers; and (c) communication of learner, school and system performance to diverse stakeholders. In preparation for a structured incentive system, a survey of teachers utilising the government housing scheme and the need for expansion of the scheme will be undertaken. This will be followed by a feasibility study into the development of a public private partnership for teacher housing.

22. *Implementation*: NIED is responsible for establishing norms and standards for teachers. Teacher licensing is the responsibility of NIED and General Services. The cluster system and teacher advisory service is the responsibility of PQA and the regions, as is the preparatory work for the teacher incentives system.

23. *Outputs and Indicators*: (a) Teacher weaknesses identified and workshops for facilitators conducted; (b) Teachers licensed; (c) Upgrading programmes provided to cluster staff and academic advisors; (d) Cluster system upgraded and functional; clusters actively involved in continuous professional development of teachers; (e) Teacher performance appraisal system developed and operational by 2009 and (f) Feasibility study conducted for public private partnership for teacher housing as part of incentive scheme for teachers.

24. *Indicators:* Percentage teachers (30%) attending continuous professional development annually; evaluations of effectiveness of Continuous Professional Development (CPD); 30% of schools meeting their annual academic performance targets

Component 3. Books, textbooks and teaching materials [N$299.9 million]

25. *Challenges*: Shortages of books and instructional materials persist, especially in primary schools, inclusive and special schools. Each learner should have 7 core books in primary school, but actually between 1.6 and 3.6 is the norm, depending on the region. In junior secondary learners should have 13 books, but actually only 4-8 books per learner are found. Other than a textbook shortage, Namibian schools are characterised by a dearth of other instructional materials, such as learner workbooks, teaching aids and enrichment materials.

26. *Objectives*: (a) Greater cost-effectiveness achieved in textbook provision and administration; (b) Adequate materials (high quality and low cost) provided to schools to support teaching and learning effectively; (c) Administrators, managers and teachers trained in effective book administration, distribution and utilisation; (d) Public-private partnerships adopted to assist in the development of a Namibian publishing industry; and (e) Adequate library and other materials, including material for special needs education, provided to support teaching and learning effectively.

27. *Component Description*: The component includes two main aspects - textbooks and teaching materials; and strengthening school libraries and resource centres.

28. First, a baseline study will be conducted to determine the current state of textbook and materials provision. Secondly, a policy on textbook and material provision will be developed, adopted and implemented. This involves review of the current textbook development practices and copyright, and identification of alternatives with a view to reduce costs. A review will be made of the design and packaging of books and materials to reduce costs. Competitive textbook development, production and distribution procedures will be adopted. Public and private partnerships will be strengthened to stimulate further development of the Namibian publishing industry. A Textbook Board will be established to advise on policies for the provision of textbooks. In addition, a review and further development will be made in the system for delivery and verification of books and materials to schools. Norms for the provision of textbooks will be reviewed and norms adopted to move progressively towards a norm of 1:2. Third, the policy will be implemented. This will include the training of relevant regional officials and school managers in the selection, use, management, distribution, delivery and care for textbooks and materials. It will involve training teachers to ensure effective textbook selection and use in the classroom. The textbooks and materials will be provided according to the progressive norms. Finally, the effectiveness of textbooks and teaching materials will be evaluated on a continuous basis through classroom observation, field testing and feedback from teachers.

29. The libraries for all schools, colleges of education and teacher resource centres will be upgraded, especially at the previously disadvantaged institutions. This requires the establishment of baseline data on the current provision of library books and other resources; definition of norms; and provision of books according to gap analysis. Emphasis will be on classroom libraries. The norm for available books per subject will progressively approach a ratio of 1:1 in core subjects.

30. *Implementation*: PQA is responsible for implementing this component.

31. *Outputs and Indicators*: (a) Baseline study report; (b) Textbook policy developed and adopted; (c) Textbook policy implemented; (d) Textbook provision more cost-effective; (e) Textbook Board established to advise on policy and oversee process; (f) Textbooks norms implemented through adequate provision of textbooks; (g) Effectiveness of teaching raised through teacher training in effective textbook use in classroom; and (h) Adequate library and other materials provided to support teaching and learning effectively. (i) Efficient utilisation of libraries. Ultimately, learning outcomes in primary and secondary education improved.

32. *Indicators*: Learner:textbook ratio at different levels; cost of textbooks as delivered to schools; number of teachers upgraded in textbook use; learner performance in examinations.

Component 4. Learner assessment [N$8.2 million]

33. *Challenges:* Namibia currently has few mechanisms below grade 12 for measuring the performance of the system against international benchmarks. Neither is there any effective mechanism for parents and other stakeholders to judge the performance of individual institutions. Few feedback mechanisms are in place to identify areas of pedagogical difficulty and current testing regimes are not well aligned with modern learning and pedagogical demands.

34. *Objectives*: A system for monitoring learner acquisition of defined skills and competencies in key subject areas in place based on standards aligned to international benchmarks and setting specific performance targets at grades 5 and 8. For the two years to come (2006 & 2007) the DNEA faces up to implementing the full localisation of the senior secondary examination and certification. Meanwhile it is anticipated to establish the section that would take charge of developments for monitoring in grade 5 and grade 8. This phase of transition needs the establishment of an

additional section to the DNEA, that would drive this monitoring exercise during its developmental stages nationally and advise accordingly at regional level.

35. The semi-external grade 7 examinations are phased out once the new monitoring of grade 5 and grade 8 performance is adopted and implemented. The flow of feedback from examination and test results to teaching, advisory and inspection services, parents and other stakeholders is systematised.

36. *Component Description*: The localisation of the senior secondary examinations will be successfully implemented. Secondly, the responsible section/unit will be established at DNEA, through staffing and infrastructure, to develop the system for monitoring and evaluation for grade 5 and 8 achievements. Standards, performance targets and test instruments will be developed in key subject areas for grades 5 and 8 to facilitate monitoring of the system against international benchmarks and the timely identification of learning difficulties. Baseline data will be collected at grades 5 and 8 against which subsequent progress can be measured prior to full testing and entry into international testing surveys. The procedures for using continuous assessment as both a formative and summative assessment tool will be strengthened. The flow of feedback from examination results to teaching, advisory and inspection services and curriculum developers will be systematised and examination and test data analysed for pedagogical use. Examination and test results will also be made available to parents and other stakeholders. Problem pedagogical areas so identified will be addressed through the development of effective teaching strategies. The implementation as well as the monitoring thereof and follow-up actions instituted will only commence in 2009.

37. *Implementation*: The DNEA and NIED will develop standards and performance targets, aligned with international standards and targets for grades 5 and 8 in key subject areas by 2010. A section for administration and managing this intervention will be established at DNEA by 2007 while test administration will begin in 2008 for baseline purposes and will be fully operational, with feedback and monitoring in 2009, permitting participation in the 2011 Third International Mathematics and Science Study (TIMSS) survey.

38. *Outputs and Indicators:* The main outputs for this component are the monitoring and evaluation section/unit established, with staff and adequate resources, as well as infrastructure. This section will prepare and spearhead further actions towards implementation as from 2010 in form of (a) standards aligned to international benchmarks in key subjects at grades 5 and 8; (b) the introduction of standards based testing at grades 5 and 8; (c) the publication of examination and test results and analyses based on these; (d) the effective use of information from testing to inform pedagogy; and (e) a testing monitoring system linked to follow-up actions.

Component 5. Pro-poor expansion of secondary education [N$772.3 million]

39. *Challenges:* Namibia has achieved a 96.4% Net Enrolment Ratio at primary level but still faces challenges in the provision of secondary education. The lack of senior secondary education has negative implications on job creation, self employment and results in lack of skilled labour. The lack of capacity is especially acute in senior secondary education as evidenced by the low transition rate. Only 46% of learners proceed from grade 10 to grade 11. Some 28 000 learners are therefore catered for through the Namibian College of Open Learning (NAMCOL). The lack of skilled graduates at grade 12 exerts a constraint on economic growth across the sectors.

40. *Objective*: The ultimate objective is to expand access and capacity of senior secondary education. In this context, the component aims at high quality senior secondary throughput as a base for developing human capital for economic growth and the transition to a KBE. The immediate objectives include to: (a) diversify delivery modes as a means of providing access to senior secondary education and training; (b) expand the supply of senior secondary education teachers so

as to enable expansion of enrolments; and (c) establish six comprehensive schools in poorer areas by 2010.

41. *Component Description*: The component involves two sub-components: general expansion of secondary education and the establishment of comprehensive schools. The first sub-component comprises the expansion of secondary education which includes the following activities: (a) study and survey existing facilities to determine under-utilisation; (b) expansion through building new classroom blocks at existing well performing schools; (c) expansion by optimising utilisation of existing facilities through maximising the use of classrooms and other specialised rooms; (d) improved utilisation of allocated teaching time; (e) increasing teacher:learner ratios; and (f) intensifying the use of open learning programmes, such as NAMCOL centres. Expansion of enrolments requires additional supplies of qualified secondary teachers. An analysis will be made to determine the demand for teachers by specific subject areas, such as mathematics and physical science based on projected expansion and taking into account attrition rates of existing teachers. The teacher supply will be served by expanding the output from UNAM augmented by fast-tracked teacher training programmes with distance education components and by recruiting qualified expatriate teachers in specialised fields/subjects.

42. A second sub-component involves the creation of comprehensive schools. Under the first phase of ETSIP, a feasibility study regarding comprehensive schools will be conducted which will lead to the establishment of six comprehensive schools. The purpose of these schools is to provide access to quality senior secondary education for able learners from disadvantaged areas. The comprehensive schools in the first phase will be situated in the poorest regions of the country. The comprehensive schools will select learners on the basis of quotas (e.g. drawing a share of learners according to degree of educational deprivation of the schools in the area) and predictive tests. Considerable planning will be done on comprehensive schools, including a comparative analysis and review of similar systems, consultation with stakeholders at national and regional levels on the articulation and concept of comprehensive schools. Norms and standards for comprehensive schools will be established, including norms for physical facilities, as well as guidelines for the establishment of comprehensive schools. Subjects to be offered at comprehensive schools will be prioritised. Sources and qualifications of teachers will be identified along with salary and other incentives to attract and retain the best teachers. Regional surveys will be conducted to identify possible locations for the first six comprehensive schools. Pro-poor criteria for admission will be developed. Organisational and management capacity will be developed, including appointment and training of staff, in advance of the establishment of the comprehensive schools. Inspectors and advisory teachers will receive training in supervising and monitoring comprehensive schools. Staff development programmes will also be designed and delivered following appointment of teachers. One of the keys to success will be the development and rigorous application of selection criteria for admission based on a quota system for learners from disadvantages schools. It is envisaged that scholarships will be provided for qualifying poor learners, and the parameters of this system will be designed.

43. *Implementation:* EPI

44. *Outputs and Indicators*: (a) Capacity at senior level secondary increased to 40 000 learners by 2010 compared to the current enrolment of 29 000. This target is achieved through increasing access for about 2 000 learners per year, over the next four years, starting from 2007. 2006 will be the initial preparatory year, where all 107 secondary schools as well as academically strong combined schools will be visited to obtain detailed data on all the facilities used, under-utilised and possible options for expansion. Information from this survey would give a clear indication of the number of additional spaces that could be made available in 2007 by fully utilising laboratories and other special rooms. It would also guide planning on where to expand, with a 3-classroom block at 17 sites, to accommodate about 2 000 more learners as from 2008. 17 such classroom blocks and 17 laboratories would be built during 2008. The same is planned for 2009 and 2010. Emphasis is put on the initial assessment of the sites as well as the academic history and social needs of schools. Expansion would occur on merit in both aspects. (b) Concurrently,

the conceptual basis for comprehensive schools is developed and six of these schools are established; and (c) Access to senior secondary education expanded from 26% of the age group (GER) to 35% of the age group.

Component 6. Equitable pro-poor distribution of resources [N$163.6 million]

45. *Challenges*: A substantial proportion of schools still lack the physical facilities that constitute an enabling teaching and learning environment. Moreover, pre-independence inequalities in resource inputs persist, specifically in the provision of education to learners with special needs and implementation of inclusive education, as well as appropriate support for orphans and other vulnerable children. Schools in the poorest communities of Namibia are least provided. In adverse weather inadequate facilities interfere with regular teaching and learning processes and lead to loss of physical resources. They also pose a challenge to efforts at modernising teaching and learning, especially the use of ICTs as instructional tools.

46. *Objectives*: (a) Eradicate inequalities in access to senior secondary education; (b) Number and proportion of schools that meet school physical norms increased; (c) Normative financing scheme designed and implemented covering recurrent financing; (d) Special education/inclusive education policy drafted and approved; (e) Resources for educational inputs distributed equitably across schools, with special provision for schools in disadvantaged areas.

47. *Component Description:* Normative per capita financing will be introduced to enable schools to acquire resources that meet set input norms and that are adequate to meet learning targets. Additional conditional grants from the Education Development Fund (EDF) will be provided to schools that fail to meet the resource input norms after applying normative financing. A physical register of schools will be completed as a basis for establishing a comparative needs assessment by school. Norms for the provisioning of physical facilities will be updated and adopted, taking into account learners with special educational needs. The policy on normative financing will be finalised and a plan developed during 2006 for its introduction over the three years, 2007 to 2009**.** In addition, special incentives will be developed to attract qualified teachers in English, science and mathematics to rural and disadvantaged areas.

48. With the HIV and AIDS pandemic, efforts will be made to provide education and psychosocial support to orphans and other vulnerable children (OVC). Evident from this is the need for relief teachers especially in cases where many teachers are incapacitated due to long illnesses as a result of HIV and AIDS. In addition appointment of paramedical staff e.g. educational psychologists, occupational therapists and audiologists. Some of the strategies may include recruiting retired teachers and training members of the National Youth Service as relief teachers. A teacher relief system will be established.

49. *Implementation:* PAD will be responsible for overseeing this component, in collaboration with General Services and EPI.

50. *Outputs and Indicators:* (a) increased number of schools in disadvantaged areas meeting school physical norms; (b) design and implementation of normative financing, with special provision for schools in disadvantaged areas; (c) special/inclusive education policy drafted and adopted; (d) resources distributed equitably across schools in accordance with input norms; (e) renovations to hostels and alterations to building works to expand access for learners with special needs.

Component 7. Build management competencies and accountability [N$10.2 million]

51. *Challenges:* School academic performance is highly correlated with the abilities of the school manager. The MoE does not require formal management training as a pre-condition for promoting teachers to become principals or heads of department. At present, opportunities for professional staff development of managers are insufficient. Principals have expressed a strong demand for

professional development and training that would enable them to manage school affairs, lead others, promote achievement of the school's mission and targets, assess the school's effectiveness, provide advice and guidance to professional staff on educational matters and develop efficient use of resources. Accountability mechanisms are not well established. Such mechanisms would have to be based on competency and performance standards for schools. It also requires incentive mechanisms such as performance appraisals and performance contracts.

52. *Objective*: Functional conditions established for effective school management, contributing to improved school and learner performance: (i) school management improved; and (ii) school performance improved, as a result.

53. *Component Description*: The improvement of school management and performance involves the following activities: First, key indicators of a well-managed school will be defined, including instructional leadership, professional support, resource management, efficient resource utilisation and focus on results. Norms and standards for effective school administration and management will be developed with key indicators in view. The next step is to upgrade job descriptions for school managers, i.e. school board members, principals and heads of departments consistent with the revised norms and standards. The recruitment processes for school managers will be reviewed and revised. Based on a training needs analysis for school managers and regional officials, a management development programme will be prepared and implemented starting in 2008. This programme will include the application of culturally sensitive inclusive management services. To improve accountability for results, all managers in education, including school managers will be put on performance based contracts based on a newly-designed system of performance appraisal. All managers and supervisors will undergo orientation and training in the performance appraisal system. As part of the performance appraisal process, supervisors will be empowered to take steps against weak performers in accordance with the Public Service Act (No. 13 or 1995). Targeted management assistance will be provided to poor performing schools. School managers will be held responsible for meeting learner performance targets for each school by 2010. Finally, a series of steps will be developed for the devolution of management responsibilities for schools.

54. Another subcomponent deals with strengthening the school inspectorate, which is responsible for supervising school management and link the functions of advisory service to work closely with the inspectorate for quality assurance using the existing national standards. This will be accomplished by updating current standards and required competencies for inspectors; conducting a training needs assessment against the standards; designing and implementing a programme of professional development; and providing sufficient office and communications equipment to enhance their effectiveness.

55. *Implementation:* PQA will be responsible for devolution and accountability measures. NIED will be responsible for definition of competencies and standards and for supervising the development and implementation of management development programmes.

56. *Outputs and Indicators:* (a) Key indicators and competencies identified for school managers, inspectors and advisory teachers; norms and standards for schools updated; (b) Job descriptions for teachers, school managers, inspectors and advisory teachers defined and adopted by 2007; (c) Inspectors, advisory teachers and school managers, including school board members have received training and development according to their new job descriptions (50 % of managers trained by 2009; evaluation of results; evidence of continuous professional development in effect); (d) Performance based contracting and performance appraisal system designed and put into effect for managers by 2010 (increase over time in attaining school achievement targets); and (e) Plan for devolution of authority to school managers adopted and put into effect by 2008.

Component 8. Improve efficiency in use of resources [N$9.1 million]

(Note: improved teaching effectiveness is expected to contribute substantially to improved learner flows through reduced repetition and dropout)

57. *Challenges*: Except for grades 10 and 11, current repetition rates are unacceptably high ranging from about 12.5 to 21.51% per grade per year. This means that 12-21% *more* learners could be accommodated in each grade with no additional resources if learner flows were efficient. Dropout rates are reasonably low for the first six years of education, but climb to 7.7% in grade 7, 9.3% and 9.7% in grades 8 and 9, culminating in about 44% in grade 10, the end of compulsory education. Thus, only about 10% of initial school entrants survive to the grade 10, and about 40% of initial entrants start senior secondary education. In terms of resource use, the national average learner-teacher ratio is 29:4, but could be raised to about 40 in primary and 35 in secondary without much sacrifice in quality. Since teachers absorb most of the expenditures in general education, such an increase would economise significantly on resources (20% more learners could be enrolled for the same cost). Where population density permits, the physical capacity of existing schools could be substantially increased by increasing the number of schools on double-shift (this may not be feasible for senior secondary because of the longer periods and school day). Teaching and management staff requires strengthened capacity to deliver multi-grade-teaching at primary level and deal with large class groups. The current junior secondary schools could also be expanded into senior secondary phase to increase capacity. In sparsely populated areas, combined schools could replace incomplete primary schools and multi-grade teaching could be expanded to use teachers more efficiently.

58. *Objectives*: (a) Efficient flow of learners increased through the general education system; (b) More intensive use made of teachers; and (c) Existing physical capacities used more efficiently.

59. *Component Description:* With a view to increasing promotion and completion rates, the component will start with a policy review on promotion. This will examine various ways to increase learner promotion without loss of achievements. In this respect, all the measures contemplated for quality improvement (definition of core competencies, rationalising the curriculum, in-service teacher development, provision of textbooks and continuous learner assessment) will assist greatly in raising promotion rates. The policy study will culminate in adoption of a strategy to achieve greater internal efficiency in learner flows. In addition, norms will be enforced for class sizes and teacher:learner ratios, starting with plans by region down to schools. This will not happen automatically and needs to be planned carefully. Policies on more intensive use of physical facilities will be revised and promulgated, including double shifting where feasible and use of combined and multi-grade schools in areas of low population density. These measures will also go a long way toward making primary and secondary schools physically accessible to children with disabilities.

60. *Implementation*: PQA will be responsible for defining and implementing norms for intensive use of physical facilities. NIED is responsible for revising policies on promotion and assessment. The Directorate: General Services will coordinate a programme to adjust staffing norms in collaboration with the Office of the Prime Minister.

61. *Outputs and Indicators:* (a) Reduction in repetition and dropout at all levels (as indicated by rates per region and grade; and substantial reductions in the costs per graduate); (b) Lower recurrent cost per learner as a result of increased average teacher:learner ratios (unit recurrent costs over time); and (c) More intensive use of facilities (increased average class sizes over time, or daily learners per classroom).

Component 9 HIV and AIDS related mainstream activities [N$132.9 million]

63. *Challenges:* The mainstreaming of HIV and AIDS issues is to be addressed in all areas; curriculum, teacher training, learning materials and management competencies. The efforts

towards mitigating the impact of HIV and Aids are countrywide and channeled according to the respective needs of communities. Additionally, in General Education, one of the many challenges is awareness and the required regulatory framework to care and support the infected and affected members in society. Teacher attrition in primary and secondary education and the systems of support for OVC from the EDF remain high priority.

64. *Objectives:* The ultimate aim of this cross-cutting matter in education is to have HIV and AIDS related issues dealt with adequately in mainstream activities as well as at managerial policy level. Specifically the objectives are to: (a) establish safe institutions offering required care and support for learners and teachers by developing systems and strategies for mitigating the prevention of HIV and AIDS in schools and hostels; (b) adopt equity policies in the workplace; (c) establish the required structures and support systems at all levels; (e) manage these through monitoring and evaluation programmes utilising information analysing and data processing systems; and (f) establish a relief teacher system.

65. *Component Description:* The HIV and AIDS sub-programme has 5 sub-components:
    (a) Awareness raising and empowerment;
    (b) Mainstreaming HIV and AIDS;
    (c) Strengthening Regulatory Frameworks;
    (d) Meeting the needs of OVC; and
    (e) Managing the HIV and AIDS response.

66. The 'mainstreaming' activities of HIV and AIDS awareness and support are embedded throughout the General Education sub-program, while other activities are detailed in the HIV and AIDS sub-program. For detailed information on HIV and AIDS activities see the HIV and AIDS sub-programme.

67. *Implementation:* All education directorates, regional offices structures and education institutions with assistance from the national unit HAMU.

68. *Outputs and Indicators:* National as well as regional structures and school based structures addressing and handling HIV and AIDS related issues.

VOCATIONAL EDUCATION AND TRAINING [N$239.9 million]

Background

1. Vocational training and skills development contribute to economic growth through their direct link to labour productivity. The initial development and constant upgrading of market-relevant skills are therefore critical factors in realising Namibia's goal of accelerated economic growth through productivity growth. A skilled workforce is also fundamental to the attainment of the objectives of increased export-oriented manufacturing and improved economic competitiveness. Among other things, Namibia's transition to a KBE will demand a skilled, competitive workforce. Unfortunately, at present skills shortage is one of the most critical constraints to growth and employment creation.

Achievements

2. Since independence enrolment in vocational training centres (VTCs) has increased more than sixteen times from about 150 trainees to 2 500 trainees. In addition, community skills development centres (COSDECs) have been established in nine locations to provide non-formal short-term training for youth and adults. An instructor training programme has been established at the Polytechnic of Namibia (PoN). The government has already planned for some reforms that respond to weaknesses in the sub-sector. A training levy was authorised by the National Vocational Education and Training Act in 1994, but has not yet been implemented. In 2003, Cabinet approved the establishment of the Namibia Training Authority (NTA) to take overall responsibility for management of the system under the direction of employers and other stakeholders, and also to devolve greater authority to VTCs to improve their management capacity and contextual relevance. A Project Management Unit (PMU) has been created to prepare for the establishment of the NTA. One of its main achievements has been the formation of Technical Working Groups (TWGs) and National Assessment Panels (NAPs) in which industry is fully involved and chairs the diffent Committees. The TWGs develop standards, qualifications and competency based education and training (CBET) modularised curricula for technical trades, commercial courses as well as hospitality and tourism. NAPs develop and manage national assessment and certification arrangements in their araes of responsibility. Despite the NTA not being legally established the above-mentioned have been achieved. Premises to accommodate the NTA was purchased by the government. At the time of writing the draft Bill is available and on its way to parliament.

Challenges

3. The main challenges are to: (a) strengthen management capacity of the system to respond to, and involve employers in policy decisions and directing the system, i.e. to make it more demand led; (b) decentralise public skills provision to respond better to local requirements and stimulate initiatives; (c) build the quality of training; (d) reduce reliance on the government for financing and provisioning of skills development, and (e) to expand coverage and outputs equitably.

Priorities

4. Establishment of the NTA, with significant employer control, is priority number one, as this will facilitate and enable achievement of all other objectives. The second priority is VET curricula reform. Priority number three is devolution of authority to VTCs. This will entail significant management development and will be done in stages. In parallel, the fourth priority is to upgrade instructors and expand their output. The fifth priority is to introduce the training levy. The final priority for the first phase of ETSIP, based on implementation of the earlier measures, is to diversify and expand the output of skilled workers through a variety of means, including stimulation of private training markets.

Priority Components

Strategic Objective A: Strengthen the management capacity of the VET System

Component 1: Establish the Namibia Training Authority
Component 2: Management development at vocational training centres

Strategic Objective B: Improve the quality of VET

Component 3: Establish competency based education and training
Component 4: Upgrade instructor qualifications and expand outputs
Component 5: Re-equip VTCs

Strategic Objective C: Mobilise resources for training and use them efficiently

Component 6: Establish the levy system

Strategic Objective D: Expand VET outputs to meet labour market demands

Component 7: Diversify and expand training provision

(Note: Only the above mentioned strategic objectives of the 15-year ETSIP Strategic Plan will be covered in the first phase of implementation. The others will be dealt with in subsequent phases.)

Component Descriptions

Component 1. Establishing the Namibia Training Authority [N$21.7 million]

5. *Challenges***.** Management of the VET system is presently lodged in the MoE and is highly centralised. This presents several problems: employers tend not to be involved in the direction of the system even though they employ most of the graduates of vocational training and know what skills are required, and training institutions have little authority which dampens incentives and accountability.

6. *Objectives*: (a) A semi-autonomous NTA is established with employers playing a majority role; (b) the NTA has taken over management and direction of the VET system; (c) delivery capacity is strengthened for the VET sub-sector; (d) demand-oriented training is achieved; and (e) industry participation at sector level is enhanced through the establishment of Industry Skills Councils.

7. *Component Description*: Under the programme the legislative framework will be established, including replacement of the current VET law of 1994 by a new VET Act, along with implementing regulations. Enactment by Parliament will be followed by appointment of the Board and secretariat. One of the first tasks of the NTA will be the preparation of a business plan. This will include elaboration of a comprehensive organisational development plan to be designed with external assistance. It will cover definition of financial, administrative and operational procedures for the NTA. Within the first two years a comprehensive VET development strategy will be prepared, covering areas of expansion to meet critical skill requirements as articulated by employers. Another major task will be to develop a Managament Information System (MIS) system on VET, and integrate it into the overall sectoral EMIS. This will be based on (a) identification of information needs for management processes and decisions; (b) formulation of data collection as by-product of normal administrative processes in training institutions; and (c) provision for regular analysis, publishing and access to information through common databases.

8. *Implementation*: The PMU for the NTA is responsible for the preparatory work for the establishment of the NTA and is overseeing the development of legal documents. Once Parliament approves the new VET Act, the Minister of Education will be responsible for establishing the Board and secretariat. Thereafter the NTA will be responsible for developing and

exercising its essential functions. The key activities on the critical path are drafting and enactment of the new VET Act, appointment of the Board and secretariat and commencement of support for organisational development. There will also be support for the senior management of the Ministry of Education and the Directorate: Vocational Education and Training in organisational development in its redefined role.

9. *Outputs and Indicators*: The component is expected to produce the following outputs (with indicators): (a) legislative framework adopted and implemented (new act gazetted); (b) employer involvement in directing the VET system; (c) productive organisation and staffing of the NTA (procedures adopted; evidence of NTA outputs and achievements; evaluation by stakeholders); (d) comprehensive VET strategy produced; (e) EMIS system operational for VET; and (f) training content re-oriented to employer demands (indicated by uptake of graduates in the labour market).

Component 2. Devolve authority to vocational training centres through management development [N$3.8 million]

10. *Challenges:* The operation of VTCs is essentially centralised, with the Directorate: VET making many key decisions for the VTCs. There is a lack of flexibility, incentives and accountability for management staff of the VTCs. More productive results could be obtained by placing the VTCs under local boards, and making them responsible for finding their markets and mobilising resources. Devolution of authority to VTC management promises benefits in terms of increased productivity and accountability, but cannot be implemented without careful planning and preparation. The purpose of this component, therefore, is to develop the management systems and competencies necessary for VTCs to assume greater authority, including training of Board members.

11. *Objectives*: The component has two objectives: (a) management capabilities of VTC Boards and management staff developed and strengthened; and (b) Quality management systems (e.g. accounting and reporting) installed and operational at VTCs.

12. *Component Description*: The first activity under the component will be to prepare an overall plan and schedule for devolution of authority. The legal and regulatory framework will be revised to allow VTCs to operate semi-autonomously under boards of directors. Administrative systems will be developed for the VTCs with local and external technical assistance covering (a) accounting systems and procedures; (b) personnel management; (c) EMIS and communication reporting; and (d) administrative manuals and procedures. Boards of directors will be appointed for VTCs along with management and administrative staff. Competencies will be defined for VTC managers and staff and registered with the NQA. Training needs analyses will be conducted among VTC management and administrative staff. The results of this needs analysis will form the basis for development and implementation of training programmes for approximately 50 VTC management and administrative staff members in general and financial management. Phased implementation of devolution will commence following the training, in 2007, probably with one or two pilot institutions and will be completed by 2010. One of the first tasks of the new VTC management teams will be to prepare centre-specific development plans as a basis for performance contracts with the NTA.

13. *Implementation*: The devolution preparation programme will be managed by the NTA. Key activities on the critical path are: changing the legal framework; preparation of a devolution plan; appointment of management; training needs analysis and developing/implementing the management development programme. The relationship of the management of the NTA and VTCs would be based on performance agreements.

14. *Outputs and Indicators*: The following outputs are envisaged: (a) boards and managers of VTCs able to manage their own operations and respond to local, regional and national market needs and development plans and raise own revenue. (*Indicators:* attainment of annual centre based

development plans; meeting target training outputs at given costs and acceptable quality standards.); (b) individual development plans completed for each VTC (Number and type of graduates and employment rates); and (c) quality management systems implimented at all VTCs, COSDECS and related institutions.

Component 3. Establish competency-based training (CBET) [N$27.1 million]

15. *Challenges*: Curricula are based on standard blocks of time spent, rather than competencies acquired. In addition, instructors are not easily held accountable for the level of trainee achievements. A more effective and efficient way of training is to focus on competencies acquired in modules. Other challenges are: (a) Horizontal and vertical articulations of qualifications through a system of credit transfers; (b) openning and broadening access to training for all target groups including disadvantaged groups and those already in employment; (c) development of training programmes for the informal, traditional and SME sector; as well as (d) enhancing communication between training providers through the formation of a providers association.

16. *Objectives*: Generally, the introduction of competency-based training in all vocational training institutions is the focus of this programme. The following are the main objectives: (a) CBET introduced and maintained in all vocational training institutions; (b) learning and skill outcomes of vocational trainees are uniform and satisfy industry requirements, (c) training system is flexible and provides for horizontal and vertical articulation. (d) recognition of compentencies of persons who are already in employment.

17. *Component Description*: The main activities needed to achieve the objectives are: First, a study tour to be undertaken by three VET curriculum specialists to learn from the experiences with CBET in other countries. The process of development of CBET will involve: (a) developing standards and qualifications according to the requirements of the National Qualifications Framework (NQF), Levels 1 up to 4 for Artisan training as well as level 5 for technicians; (b) defining knowledge, skills and competencies to be acquired by trainees; (c) appointing working groups in different occupational areas; (d) acquiring/purchasing CBET packages in consultation with stakeholders, including copyright agreements; (e) identifying and developing CBET packages for new areas, such as entrepreneurship and HIV and AIDS awareness and acquiring or developing associated training materials; (f) Development of assessment materials and training of assessors, verifiers and moderators; (g) establishment of assessment panels and implementation of a new competency based assessment and certification system in collaboration with the NQA; (h) registration and accreditation of training providers in collaboration with NQA; and (i) orientation and training of all training providers on the implementation of CBET.

    The next major step will be to verify CBET packages with stakeholders, especially employers. Once completed, the national vocational qualifications will be registered within the NQF. The third phase will involve reforming the existing testing and certification system according to CBET; revising inspection procedures and manuals; developing and implementing training programmes for instructional staff in CBET methodologies; and training managers, assessors and verifiers in CBET methodology. It is vitally important that employers understand and approve the CBET system. Therefore, a key step before implementation will be to market and promote the CBET system with employers. In addition, an overall implementation plan and schedule will be prepared for introducing CBET, starting with piloting at one of the VTCs. CBET programmes will be introduced progressively starting with key trades in Year I, accompanied by monitoring of progress and evaluation of results.

18. *Implementation*: The NTA will be responsible for developing and implementing the CBET programme based on initial work already underway.

19. *Outputs and Indicators*: Two main outputs are envisaged: (a) CBET used effectively as the method of training in vocational training centres (as indicated by monitoring and evaluations); (b)

learning; skill achievements and employability of trainees increased (*Indicator*: performance on skill tests); (c) Technician level training provided for - training to NQF level 5. (d) increased number of trained moderators, assessors and verifiers; (e) assessment panels and new competency based assessment and certification system established in collaboration with NQA.

Component 4. Upgrade instructor qualifications and expand outputs [N$1.7 million]

20. *Challenges:* Previous assessments have noted that the majority of instructors in VET institutions, except some in the non-public VTCs, are poorly trained and their technical skills are of variable quality. Many have had little formal or recent industrial experience and their levels of literacy in English, numeracy and ICT need substantial lifting. About half of the instructors teach at levels equivalent to their own highest formal qualification. Upgrading of instructors is all the more urgent given the need to introduce CBET (Component 3) and to expand outputs from vocational institutions.

21. *Objectives*: The objectives of this component are: (a) technical and instructional competencies of instructors raised to defined standards; and (b) supply of trained instructors increased to support VET expansion plans.

22. *Component Description*: The component involves activities both for in-service upgrading of instructors and expansion of the supply of qualified instructors. In-service upgrading includes: (a) definition of minimum and desired competencies for instructors, i.e. establish detailed standards for instructors; (b) conducting a training needs analysis of current staff to identify gaps; (c) re-designing existing in-service training programmes in line with required competencies; (d) contracting training institutions to develop and deliver in-service training, including training of trainers and inclusion of industrial experience - serious consideration will be given to using SADC institutions, based on evaluation of relative costs and quality; and (e) evaluating the existing training programme at the PON against the newly defined competency standards. This evaluation will be used to develop or revise current in-service training programmes at the PON. In addition, a mentoring support system will be developed at VTCs for continuous in-service development of instructors. As a basis for expanding the supply of newly trained instructors, the supply and demand for instructors will be projected taking into account overall VET expansion plans developed by the NTA and attrition rates, both for the public and non-government sectors. Special attention will be given to skills areas in growing demand by employers. Following these analyses of in-service and pre-service requirements an overall VET instructor development plan will be prepared. The plan will include a comparative analysis of whether additional instructor training capacity should be established in Namibia or other institutions used within SADC, as indicated by cost-quality analysis. (f) recruiting qualified and experienced instructors from the local, regional and international environment, where necessary; and (g) training instructors that are able to facilitate training at middle management (technician) level.

23. *Implementation*: Implementation would be the responsibility of the NTA in collaboration with the PoN.

24. *Outputs and Indicators*: The component will generate an array of outputs: (a) competency standards for instructors defined; (b) training needs analyses completed; (c) in-service training programmes delivered to about 150 instructional staff (evaluation of numbers trained and results obtained); (d) instructor qualifications raised to defined standards (as indicated by examinations); (e) pre-service instructor training expanded by about 100 new instructors (numbers trained); (f) instructor development plan prepared and implemented (monitoring and evaluation); (g) mentor support system in place in VTCs (assessment by trainees). (h) learning and skills achievement and employability of graduates increased.

Component 5. Re-equipping VTCs [N$23.7 million]

25. *Challenges*: Quality training requires sufficient, up-to-date equipment in working order. To provide quality training, institutions must provide for turnover of equipment to keep equipment up-to-date. Moreover, the introduction of CBET inevitably will require different kinds of equipment in many cases. The challenge is do this in an affordable manner. Therefore, the component includes provision for re-equipping VTCs and installing procedures for proper maintenance. It must be noted that in this process there would be no compromise on the quality of equipment. However, notice must be taken that some of the VTCs have and are benefiting from other donor support.

26. *Objectives:* (a) Equipment standards met at all VTCs; (b) increased learning and skill competencies acquired by trainees.

27. *Component Description*: The re-equipping of VTCs will entail the following activities: (a) define equipment standards in line with CBET curricula; (b) survey existing VTCs and other training institutions, comparing actual provision with defined standards to identify gaps and equipment needed; (c) prepare equipment lists and obtain necessary budget approval; (d) arrange for installation of equipment; (e) provide training in use of new equipment for instructors; (f) design workable system for equipment maintenance; (g) prepare and deliver training programmes in equipment maintenance; and (h) hold VTC managements accountable for following proper maintenance procedures.

28. *Implementation:* The component would be implemented under the NTA with the full collaboration of VTCs.

29. *Outputs and Indicators*: (a) definition of equipment standards for various training programmes; (b) completed gap analysis of equipment needed; (c) equipment standards met at all VTCs (based on assessment); and (d) trainee competencies increased particularly in terms of practical skills (as evidenced by assessment of learning and skills outcomes).

Component 6. Establish an effective levy system [N$0.9 million]

30. *Challenges*: The 1994 Vocational Edcuation and Training Act allowed for a levy on payrolls to be used to finance vocational training. This has never been implemented. However, the establishment of the NTA with majority employer control presents an opportunity to introduce the levy to suit the needs of employers. The case for a levy rests on four reasons: public funds are limited by overall deficits in public spending and other urgent national priorities. Given widespread poverty, training fees are relatively inelastic as a way of increasing income to institutions. The private sector, as one of the main beneficiaries of training, should share in the costs for improvements in the type and quality of skills available to them. Second, firms presently under-train, in part because they may lose trained staff to competitors. A levy should be designed to give all enterprises a financial incentive to train their workers. Third, a training levy should raise revenues to finance a much-needed expansion of VET outputs. Finally, a levy could stimulate an increase in the number and variety of VET providers, mostly private.

31. *Objectives*: The component has four objectives: (a) an effective levy system is in place; (b) the amount of non-government financing available for training is increased substantially; (c) training within enterprises is stimulated; and (iv) training is based on employer demand.

32. *Component Description*: The aim of the component is to design and implement a levy system for skills development. This requires, first, policy decisions on the main recommendations of the recent feasibility study, including rate of collection, size of establishments levied, and mechanisms for collecting the levy. These policy decisions will be taken in collaboration with stakeholders. The challenge in levy systems is to ensure that the costs of administration of the

system justify the resources raised, i.e. the levy system should be easy to administer. Subsequently, regulations for the levy system will need to be developed; an accounting system adopted for contributions and use of levy proceeds, as well as reporting procedures for communicating to stakeholders revenues raised and their destinations. Criteria and procedures for accessing the funds will be developed by the NTA. It is important that the government does not reduce its contribution to VET when the levy is enacted.

33. *Implementation*: The NTA will be responsible for developing and implementing the levy system.

34. *Outputs and Indicators*: The component is expected to generate the following outputs: (a) effective and efficient training levy in operation (as assessed by employers); (b) increased revenue to be used for training (amount of net financing mobilised for training); (c) increased output of skills into the labour force, increased upgrading of skills in the economy (numbers of people who acquire skills by occupation); (d) increased employer interest in training and increased employer incidence of training (i.e. evidence of more training by employers); and (e) increased private provision of training through levy proceeds.

Component 7. Diversify and expand training provision [N$161 million]

35. *Challenges:* The initial production and constant upgrading of market-relevant skills are critical factors in realising Namibia's goal to accelerate economic growth through productivity. Yet, skills shortage is one of the most critical constraints to Namibia's growth and employment creation. In addition, the social demand for training far outstrips supply. Only about 3 per cent of those who complete grade 10 can gain admission to VTCs. The participation of marginalised and designated groups as well as employed rural and urban youths needs to be increased.

36. *Objectives:*. (a) Availability of skills in the labour force expanded as needed for economic growth; (b) expanded opportunities for school leavers to acquire skills needed for employment and income generation; (c) ultimately, increased labour productivity.

37. *Component Description*: The component embodies a varied strategy to diversify and expand vocational education and training. Implementation of the strategy would commence with an assessment of the current capacity and utilisation rates and expansion potential of training institutions. The results of the first assessment would lead to measures for the expansion of enrolments and outputs through greater efficiency and more intensive use of existing facilities, such as evening and weekend training. Expansion of enrolment would be supported in high quality existing VET institutions. Much of the needed skills production will have to be provided in non-government training institutions. Therefore, the strategy also calls for the design and implementation of incentives to stimulate expansion of training by private providers. Construction of new vocational training centres and COSDECS as well as the renovation of four existing COSDECs and similar institutions will be embarked upon. The component would also support an identification of the beneficiary incidence of participation in VET by region, language, income, gender. The results would provide a basis for development and implementation of a plan to increase enrolment of high priority target groups. A comparative analysis will be undertaken of the cost-effectiveness of creation of new VTCs in Namibia vs. sponsoring trainees in other SADC countries with a view to expanding annual training by about 3 000 persons. Finally, an exploration will be made of the use of ICT and distance learning as means to expand the output of skills, particularly for those unable to attend formal training institutions. It must be noted that it will be limited only to those areas that ICT and distance learning modes have proven to be effective within VET.

38. With regard to the COSDECs, Kayec, Ehafo and other similar institutions it is hoped that increased output would be realised through the new modular competency-based curriculum that is steadily taking shape in the VET system.As for the COSDECS, mobile units would also be utilised.

39. The College of the Arts will be brought within the VET system.

40. *Implementation:* The vocational expansion programme will be undertaken under the auspices of the NTA.

41. *Outputs:* (a) Thirty percent increase in enrolments in existing VTCs (from 2 100 to 2 800); (b) enrolment of approximately 3 000 trainees either in existing VTCs, new VTCs in Namibia or in SADC institutions; (c) about 1 500 trainees completing COSDEC courses per annum.

TERTIARY EDUCATION AND TRAINING [N$91.2 million]

Background

1. Tertiary education and training contributes to development in multiple ways. It informally sets quality standards for the entire education system. It produces high level technical and managerial personnel required for economic growth and competitiveness. It generates knowledge workers and researchers essential to knowledge-driven development. It provides enterprises with technical support and partnership to spur knowledge-based innovation. It delivers policy analysts and managers to the public and private sector. Thus, support for improving tertiary education is essential for the success of ETSIP.

Achievements

2. The sector is dominated by two institutions, the University of Namibia (UNAM) and the Polytechnic of Namibia (PoN) which are autonomous institutions, governed by their Councils, in which academic freedom is well respected. Four colleges of education also form part of the sector. UNAM has seven faculties covering a broad sweep of disciplines while the PoN has a technical focus but also addresses the national needs in economically significant areas such as hospitality and environmental management. The annual output of degree holders from UNAM is currently around 700 per year, of which only about 10% are science degrees. The total annual output of the PoN is around 1 000, about half of which is at national diploma level and the rest at certificate level. The PoN is actively seeking to build its capacity to offer graduate level studies, particularly in those areas such as engineering and ICT where it is the main centre for such studies nationally. Neither institution offers honours level studies. Structures are in place to ensure that the output of the institutions matches demand in both quality and quantity, but this is seldom achieved in practice and areas of national human shortages, such as science, engineering and agriculture, are characterised by relatively low enrolment and high dropout rates in both institutions. Both institutions are experimenting with a variety of remediation measures to help these students overcome the legacy of inadequate basic education.

3. UNAM and the PoN are primarily teaching establishments. Masters and doctoral level programmes exist but these are not significant either in their numbers or in their contribution to the national knowledge base. Most research, particularly in the scientific and environmental areas, is done in government research institutes and a variety of non-governmental and private research institutions. Given the size of the country, the overall research base is significant in both quality and quantity, but lacks coordination.

4. Teacher education is shared between UNAM and the four colleges of education which are governed by the MoE and all teach the same well-established three-year Basic Education Teachers Diploma (BETD) leading to specialisations in lower primary, upper primary or junior secondary levels. Some 600 teachers graduate each year from the full-time BETD programme while about 400 graduate from the BETD INSET Programme. UNAM trains teachers for the senior secondary level and currently graduates approximately between 150 and 180 students per year of which more than a third is mathematics and science teachers. In terms of an agreement with Zimbabwe, 800 teacher-diploma graduates in mathematics, science and agriculture will be returning to Namibia by 2008.

5. Three Acts of Parliament have recently entered the statute book designed to take different aspects of the management of the sector out of the political arena, but have not yet been fully operationalised. The Higher Education Act, establishing the National Council for Higher Education (NCHE) will provide mechanisms for making tertiary institutions more directly responsive to national needs. The Teacher's Education Colleges Act should bring to the colleges the level of professional and managerial autonomy enjoyed by UNAM and PoN. The Research, Science and Technology Act provides mechanisms for stimulating and supporting research activities in all institutions and also for linking research to development.

Challenges

6. *Improve institutional development capacity of tertiary education*: The NCHE should be established as a strong institution to spearhead policy reforms and implementation. Its functions should include co-ordinating intitutional collaboration to avoid duplication of programmes, strategic planning for the sub-sector, acticulating norms and standards, enhancing quality assurance, overseeing the work of the Advisory Council on Teacher Education and streamlining financing of tertiary education.

7. *Improve equitable access and quality of tertiary education and training*: The first step in improving quality at this level is to raise the quality of the intake. Pre-entry and foundation courses need to be expanded to increase rapidly the intake and improve its quality, particularly in languages, science and mathematics. These courses should be targeted to disadvantaged groups. Special courses offered to ease learning difficulties of already enrolled students should be expanded and reinforced. Staff development programmes should be expanded to improve the qualifications of a wider base of academic staff. Finally, quality assurance measures should be improved and applied across institutions.

8. *Strengthen the research capacity of tertiary institutions*: Research policies should be adopted that orient research to areas of strategic importance to Namibia's economic growth and development. Graduate programmes at UNAM should be strengthened to promote the culture of research. Staff development should be launched to strengthen the research skills of academic institutions. In addition, competitive funding should be allocated for R&D in tertiary institutions and they should actively cultivate networking in the domain of R&D with specific reference UNITWIN and UNESCO Chairs.

9. *Mobilise additional resources for tertiary education*: First, means should be devised to make more efficient use of existing resources, including increasing the average number of students per lecturer and instituting normative financing as a basis for allocation of public funds among institutions. Second, means to mobilise non-government resources should be sought through greater cost-sharing with beneficiaries and the private sector. Finally, inter-institutional co-operation should be strengthened.

Priority Components

Strategic Objective A: Strengthen institutional capacity of tertiary education

Component 1: Develop the NCHE
Component 2: Implement the Teachers' Education Colleges Act

Strategic Objective B: Enhance relevance and responsiveness of tertiary education

Component 3: Develop and operationalise the teacher education reform programme
Component 4: Build capacity for graduate studies and research

Strategic Objective C: Improve the quality of tertiary education and training system

Component 5: Develop pre-entry, foundation programmes and student support
Component 6: Improve the effectiveness and productivity of academic staff
Component 7: Introduce quality assurance systems

Strategic Objective E: Mobilise financial resources and use them efficiently

Component 8: Diversify financing sources
Component 9: Efficient resource use

(Note: Only the above mentioned strategic objectives of the 15-year ETSIP Strategic Plan will be covered in the first phase of implementation. The others will be dealt with in subsequent phases.)

Component Descriptions

Component 1. To establish a functional National Council for Higher Education [N$3.3 million]

10. *Challenges*: The tertiary education and training sub-sector lacks a central advisory and regulatory body that can interpret national development policies, priorities and goals. The sub-sector has experienced the following problems: lack of vision and coordination; lack of articulation of programmes; and lack of standards and procedures for accreditation and transfer of individual credits between institutions.

11. A National Council for Higher Education (NCHE) was formally established by a parliamentary act, Act 26 of 2003. The objectives for the council are to advise the Minister of Education on policies both on the Minister's demand and on its own accord in questions regarding: (a) a coordinated system of tertiary education; (b) access with equity to tertiary education; (c) quality assurance in tertiary education; and (d) allocation of funds to public tertiary education. The council was launched towards the end of 2005 and several sub-committees have been established.

12. *Objectives:* (a) The NCHE, its secretariat and sub-committees have been established; and (b) NCHE has become operational and effective.

13. *Component description*: The component will support the establishment of the NCHE secretariat, its incremental operating costs and financing for its key initial tasks. The work programme of the NCHE includes the following activities:

14. Comprehensive strategic plans and policies for tertiary education and training. The NCHE will develop a comprehensive strategic plan for the sector which will co-ordinate all and guide all tertiary education and training activities, programmes and development. The strategic plan will articulate and use indicators of well-managed tertiary education institutions.

15. Coordination and accreditation. The NCHE, through its secretariat, will (a) review the present situation as regards accreditation of students' qualifications and possible transfer of study results between institution and will propose measures for establishing a policy on accreditation; (b) review the present situation of organisation and administration of public institutions of HE and propose measures for a harmonised system; and (c) evaluate the registration of private providers of tertiary education and the accreditation of their courses and propose measures for stimulating high quality provision by the private institutions.

16. Access with equity. The NCHE will evaluate the present situation and propose measures for expanded access and equity as regards gender, geographical origin, disability and disadvantaged groups.

17. Quality assurance. The NCHE will suggest a system for quality assurance. The NCHE will advise on staff appraisal and staff development programmes and on the introduction of a quality assurance programme. These specific activities should be supported under ETSIP as key priority. One of the activities to be undertaken will be to conduct institutional audits of the sub-sector.

18. Allocation of funds. The NCHE will evaluate the funding formula and other principles for money allocation and propose a policy. The NCHE will work on diversified financing resources and the efficient use of money.

19. The Directorate: Higher Education will initially serve as secretariat for the NCHE. Within the first three years of ETSIP it is envisaged that an independent secretariat will be established. This will only be possible once amendments to the Higher Education Act are effected. The process of

securing a legal practitioner to spearhead the amendments will commence in May 2007. In the meantime, the Public Service Commission has been approached for permission to fill, on a contract, four positions, including that of the head of the Secretariat. It is hoped that this move will strengthen the present Directorate: Higher Education staff who are failing to cope with the work due to the small number of staff in the directorate.

20. This secretariat will take on evaluations and minor field research projects that are needed as input for the advisory responsibilities of the council. The Secretariat will also serve the Advisory Council on Teacher Education and Training.

21. *Implementation*: The Directorate: Higher Education and its technical advisor are responsible for the establishment of the NCHE and its secretariat. The technical advisor has the explicit responsibility to support the capacity for the NCHE and its secretariat until early 2007.

22. *Outputs*: An operational and effective NCHE will lead to substantial improvements in building a coordinated system for tertiary education, access with equity, quality of teaching, learning and research and improved adequacy of money allocation to publicly funded institutions for tertiary education. The secretariat for the NCHE will be established. A comprehensive strategic plan will be available.

Component 2. Implement the Teacher's Education Colleges Act and related actions [N$5.4 million]

23. *Challenges:* All research done on the state of teacher education indicates that the enhancement of the status of colleges and a change in institutional governance are prerequisites for improvement in the quality of the output of colleges. The current situation undermines the academic authority and autonomy of college lecturers, and colleges are at risk of weakening the professional staff of colleges and of eroding their academic and management capabilities. Colleges are experiencing an alarming brain drain of motivated and ambitious academic staff because of a lack of academic challenge and research possibilities, as well as poor salaries and working conditions.

24. *Objectives:* The purpose of this component is to fully implement the Teacher's Education Colleges Act. Specifically, (a) the Advisory Council on Teacher Education and Training (ACTET) has been established and is functioning effectively; (b) the autonomy of colleges has been increased through the establishment of Boards and financial autonomy in conjunction with performance-based conditions of service similar to other tertiary education institutions; and (c) as a result of these changes, proper incentives have been introduced for staff development and research, as well as improved working conditions for academic status of colleges (less administrative work, fewer teaching hours). These changes have reduced dramatically attrition rates among academic staff. Operationalising ACTET will have created an appropriate foundation for the effective management of the development of teacher education across the sector.

25. *Component Description:* The Teachers' Education Colleges Act (Act No 25 of 2003) provided, for the first time, a legal basis for the establishment and closing of colleges. It also includes provision for an umbrella body, ACTET. The functions of ACTET are to advise the MoE about directions for teacher education at colleges. In addition, the Act envisages marked changes in the governing and autonomy of colleges. The current college councils and management committees will be replaced by College Boards. The administration of colleges will be strengthened by creating a post of Registrar. The Act allows colleges to manage their own funds and also provides for the establishment of a Teachers' Education and Training Fund.

26. The MoE will establish and operationalise ACTET and its secretariat. It is envisaged that the NCHE secretariat will also serve ACTET. The operational framework and the regulations and procedures of ACTET will be clarified in preliminary meetings with relevant stakeholders and authorities, and members appointed. Technical assistance will be provided to assist in drafting the

operational framework for the ACTET. ACTET will establish a task force to review teacher education (see Component 3).

27. Concurrently, ACTET will oversee the devolution of management responsibilities to the colleges of education. A plan of action will be developed to guide the smooth and implementation of the activities. The Boards of Colleges of Education will be established and operationalised. These Boards would govern the Colleges regarding all issues pertaining to students and staffing, academic monitoring and quality assurance, as well as managing the Teachers' Education and Training fund. Changes necessary in current management structures at colleges will be made in accordance with the Act and new positions (e.g. registrar, student counsellor, chief librarian, asset manager) budgeted. The administrative and student support services component would be strengthened to relieve the academic staff to engage more in academic research and development. The use of senior positions and the division of Academic Departments will be reconsidered and revised accordingly. Capacity development support will be provided for colleges in terms of financial and strategic planning. Functions previously provided by the MoE will be delegated to Colleges following appropriate training in financial and management control systems. Also during this phase a review will be undertaken regarding the grading and salary structure of college staff, as well as the entry requirements for these positions (It will be raised to at least Masters Degree level). At the end of this first phase, colleges should be governed as semi-autonomous bodies with the same tertiary status, facilities and salary structures as other tertiary education institutions.

28. *Implementation:* ACTET will be established as a first priority, before the end of February 2006. College Boards will replace current Councils by the end of 2006. New salary structures will be put in place by the end of 2007. A first review of the work of ACTET and the functioning of the new college structures will be commissioned by ACTET by 2010. It is envisaged that the NCHE will be responsible for review and monitoring of the ACTET.

29. *Outputs:* The two outputs of this component are (a) a well functioning ACTET able to offer coordination and direction to the teacher education service across the sector; and (b) well managed, semi-autonomous colleges of education, managed by Boards, with an appropriate staff structure supporting a motivated, competent and well qualified staff.

Component 3. Develop and operationalise the teacher education reform programme [N$28.5 million]

30. *Challenges*: Criticism of the quality of teachers produced by the colleges of education and UNAM is widespread. Issues such as lack of content, wrong content, lack of appropriate methodologies, poor delivery of the programme and poor response to the needs of the schools are cited, (albeit often without proper research and data). At present there are no clear guidelines on the content, quality or throughput by phase and subject and no umbrella body exists to provide such guidance to teacher education institutions. The NQA is developing regulatory structures for professional standards for teachers and teacher education institutions. These will be operationalised within the next five years and the reform programme will fall within, and will to a great extent, be dictated by these standards and structures.

31. *Objectives*: A comprehensive reform plan for teacher education is developed and operationalised for the 15-year period to 2020. The reform plan covers, *inter alia*, curricula, the qualifications of staff, the mandate of the different institutions, the underpinning philosophies, the delivery of programmes, projections of supply and demand, institutional capacity and some physical infrastructure.

32. *Component description*: A permanent teacher education task force with a range of sub-committees, reporting to ACTET, will be established to prepare a teacher education reform plan and to oversee and monitor its operationalisation. The terms of reference of the task force will be broad and include the following issues: (a) review responsibilities of all institutions for specific phases and subject areas; (b) review and revise teacher education curricula to reflect standards,

competencies and skills as set by the National Standard Setting Body 05 (NSSB 05) of the NQA Council; (c) develop the necessary additional structures and programmes to operationalise the National Standards for the Teaching Profession established under NSSB 05; (d) mainstream ICT in teacher education programmes and ensure that facilities match the need, in line with the ICT in Education Policy; (e) develop training programmes, training capacity and facilities for emerging subjects (such as Computer Practice, Design and Technology and Entrepreneurship) as well as managing large class groups and multi-grade teaching; (f) propose and institute measures to enhance the internal efficiency of existing programmes and the optimal use of physical facilities; (g) ensure that institutions expand in line with supply and demand projections and that they have the necessary physical facilities; (h) ensure full articulation between teacher education qualification programmes; (i) review the minimum qualification requirements for teacher educators in all phases (including pre-primary education) and ensure that necessary professional development programmes exist; (j) review courses and conditions for certification; (k) review the role of the initial teacher education institutions in supporting continuous professional development; (l) ensure that appropriate training programmes and components are in place to meet the challenges of HIV and AIDS, i.e. HIV and AIDS mainstreaming and mitigating the impact of HIV through teacher training and teacher replacement needs; and (m) ensure that appropriate training programmes and components are in place to meet the demands of the national Special Education Needs (SEN) programme.

33. Following the devolution of professional and administrative responsibilities to the colleges a number of upgrading programmes will be required. These are: (a) an upgrading programme for the college library and information systems to raise them to national standards following specialist recommendations; (b) the creation of additional teaching and hostel space to meet the expanded demand and the requirements of emerging subjects.

34. *Implementation*: (a) The ACTET task force will be established in 2006 with reform implementations beginning shortly thereafter. (b) Training facilities for emerging subjects should be in place by 2008 and an expansion of the colleges to create teaching and hostel spaces for an additional 1200 students together with expanded student facilities should be in place by 2012. (c) The phased reform of the college library services will commence following the development of a costed blueprint in 2006. The computerising of databases and lending systems will run concurrently with the reclassifying of all library stock, according to the Dewey Decimal Classification system, and will commence in 2006.

35. *Outputs*. The expected outputs are as follows: (a) The ongoing reform of the BETD and B.Ed programmes will continue until subsumed by wider reforms; (b) The phased programme of reform of the teacher education sector will be completed in 2007 following the development of the standards for the teaching profession in 2006; (c) Training programmes for emerging subjects should be operational from 2008; (d) All teacher education graduates should be ICT literate and be able to integrate ICT into the classroom by 2009 in response to the activities provided for in the ICT in Education sub-programme; (e) HIV and AIDS mainstreaming in all curricula by 2009 (f) The first cohort of graduates from institutions implementing reformed programmes, able to respond adequately to the demands of the profession, and matching the demands in terms of numbers and subject areas, should be in the schools by 2012; (g) The new college library and information systems should be in place by 2008; (h) The physical expansion of the colleges to provide an extra 1 200 places, including hostel facilities, and to upgrade SRC and student recreational facilities will be complete by 2012; and (i) The first phase of the physical expansion of the UNAM to provide an extra 300 places, including science laboratories as well as a dedicated computer laboratory for Faculty of Education, hostel facilities, and to upgrade SRC and student recreational facilities will be complete by 2011.

Component 4. Build capacity for graduate studies and research [N$12.6 million]

36. *Challenges:* Knowledge creation and the strategic application of information communication technologies are central to economic growth and national development. High quality tertiary

education is a *sine qua non* for national development and the transition to a Knowledge Based Economy. While tertiary education and training institutions offer graduate studies in a range of academic disciplines, the current ratio between graduate and undergraduate studies is sharply skewed in favour of undergraduate enrolment. Moreover, the current supply of highly qualified human resources in areas critical to national development such as agriculture, fisheries, information technology, science, engineering, geology, medical science, accountancy, and business management does not match the demand of the employment system in the long run - neither quantitatively nor qualitatively. UNAM does not offer a medical and engineering degree. Students who want to specialise in these fields, spend two years at UNAM and then proceed to universities in South Africa and abroad.

37. Namibia is at the periphery as far as the following aspects of KBEs are concerned: (i) quality, quantity and rate of publishing scientific papers in international citation academic journals (publication in local peer-reviewed academic journals is well developed in some fields); (ii) patent applications and registrations; (iii) published scientific papers per capita; and (iv) the use of personal computers and the internet.

38. Compared to other middle income countries in the SADC region, such as Botswana and Mauritius, research output and knowledge creation at tertiary education and training institutions are low. UNAM, which is at the apex of the system, has a limited capacity in basic and applied research. Inter-institutional co-operation in the domain of research is virtually non-existent. Most research takes place outside tertiary institutions in ministries and state-funded and/or independent research bodies such as the Desert Research Foundation of Namibia (DRFN), the Namibia Economic Policy Research Unit (NEPRU), Geological Survey and the Institute for Public Policy Research (IPPR). With the exception of the DRFN, NEPRU and the IPPR, research mentorships are not that common, while the management of most research institutions is not preparing adequately to respond to future research demand. Policies in favour of quantitative growth at graduate level have to be accompanied by strategic interventions to strengthen the quality of teaching, learning and research infrastructure. Quantitative policies in favour of increasing enrolment at graduate level have to be supported by increased internal efficiency, an assessment of the cost of such programmes against graduate education the SADC region, improved research output, appropriate research infrastructure, incentives for research, quality and equity to bolster success rates at graduate level.

39. *Objectives:* This component has two key objectives. Firstly, developed graduate studies would increase the intake, output and quality of graduates in areas of national human resource shortages as identified in Vision 2030. These areas include: agriculture, engineering, information technology, accountancy, business studies, geology, marine biology and medicine. Secondly, research capacity would be developed in critical areas for Namibia to contribute to the KBE. Once achieved, these two objectives would in turn lead to improved overall performance of tertiary education institutions, improved quality in teaching, learning and research, improved output of graduate students and reduced inequality of study opportunities at graduate level.

40. *Component description:* Tertiary education and training institutions will critically review their existing graduate programmes and support infrastructure for research against improvements in enrolments, dropout rates, admissions from disadvantaged groups and regions, perceived weaknesses of students and staff, against fiscal and academic sustainability, and the human resource requirements of the labour market over the ETSIP time period and beyond. In the first instance, existing graduate programmes in areas of national importance must be consolidated so as to deliver relatively quick returns. A comprehensive national audit will then follow. A national audit by representatives of all tertiary education institutions, the MoE, the NCHE, the National Planning Commission (NPC), as well as the private sector, will be undertaken to evaluate the potential for institutional co-operation to maximise benefits from graduate programmes. Based on these reviews, realistically costed programmes will be mounted or revised and appropriate support systems for teaching, learning and research established.

41. All tertiary education institutions will develop research policies, determine research priorities relevant to national development needs and build appropriate research infrastructure and capacity (inclusive of linked data bases, archives, library holdings, research portals, laboratories, a mentorship system for young researchers and training in research methods for academic staff and students). Institutional research and subject-based applied research will be prioritised, for example in education, special education, languages and computing. Each tertiary education institution will build appropriate research networks, link research to technological development, establish inter-institutional task forces and engage in collaborative research. Appropriate incentives for research, such as performance-based funding, funding based on the approval of peer reviewed research plans and projects and publishing in peer-reviewed scholarly journals will be developed. Institutions will, where appropriate, establish research funds and access funds from the National Research Fund.

42. *Implementation:* The review of existing graduate study programmes and research capacity will be conducted by the Pro-Vice Chancellor Academic Affairs and Research, the Director of Postgraduate Studies with the Postgraduate Studies Committee, the Office of Strategic Planning, Deans and Faculty Boards and the Multi-Disciplinary Research Council (MRCC) (in the case of UNAM). In the case of the PoN, the Office of the Vice-Rector and the Strategic Planner will undertake the review. In the case of colleges of education, the Rector will appoint an appropriate person to undertake the task. In all cases, the review will take place in 2007 to allow critical planning and financial decisions to be made as soon as possible. Reconfigured and new programme development can then be started, initially allowing for a two-year period of transition for phasing out, (re-)designing and implementing. Recast, staffed and robustly supported graduate studies and research infrastructure will be operational by 2010/2011.

43. *Outputs:* The expected outputs and indicators, evident from 2009/10 onwards, in some cases earlier, are: (a) Expanded output of graduates with research and academic skills relevant to national development needs as articulated in Vision 2030; (b) All tertiary education and training institutions will have research policies and infrastructures that are sensitive to national development needs; (c) The National Research Council and CIET would be established and be providing direction to research at tertiary education level; (d) Inter-institutional research in areas of critical importance as identified above will be in place; (e) The ratio between undergraduate and graduate students will improve by 10 percent from 2008 and by a further 5 percent over the following five years; (f) 50% of research conducted within tertiary education and training institutions will be peer-reviewed and be published in local and international journals and this will be reflected in the promotion of academic staff; (g) Research will be reflected in teaching at both undergraduate and graduate level; and (h) An internationally benchmarked grading system based on research for academic staff will be developed and implemented by 2011.

Component 5. Develop pre-entry, foundation programmes and student support [N$15.6 million]

44. *Challenges*: The current programmes for producing graduate and diploma level students are characterised by low and biased admissions, high failure rates and an output whose competencies are not well-matched to needs. There is ample evidence that one cause of this is the failure of the basic and secondary education system at all levels to meet demands both in quality and quantity. Breaking the cycle of underachievement that this generates is a task that, if it is to be effective, must be tackled simultaneously at many points in the cycle, a significant one being the attempt to redress the mismatch between exit skills at secondary level and the required entry skills at the tertiary level through pre-entry (before entry) and/or foundation (after entry) programmes.

45. More specifically: (i) Information is largely lacking on both the demand for, and characteristics of, graduates in science and technology fields; (ii) Current admission and completion statistics into most science and technology related subjects show a marked gender bias as well as low admissions from the least advantaged groups; (iii) Guidance on, and information about, science-based programmes is currently lacking in schools and is required *before* critical career choice

decisions are made at the end of grade 10; and (iv) Student facilities in the colleges are inadequate and inappropriate for their emerging structure as expanded self-governing tertiary education institutions.

46. *Objectives*: The intake in all tertiary education institutions, particularly in areas of national human resource shortages is increased and dropout rates reduced. Overall performance of tertiary education institutions is enhanced and the representation of regional, marginalised and designated groups in tertiary education is improved.

47. *Component description*: This component comprises a sequence of steps: (a) Each institution will review critically its existing pre-entry and foundation programmes against improvements in admissions, dropout statistics, admission numbers from disadvantaged groups, and perceived weaknesses of students; (b) A national review by representatives of all institutions, coordinated by the MoE, will evaluate the potential of institutional co-operation to maximise benefits from existing and future programmes; (c) Non-government sources of funding to support the establishment and also the running of pre-entry and foundation programmes will be explored by the institutions; (d) Each institution will develop and implement appropriate selection criteria for pre-entry programmes based on quotas and tried predictive tests; (f) Each institution will review its general student support activities and mechanisms and institute a phased and costed improvement programme. This will include study skills, social issues and HIV and AIDS issues; (g) the institutions, the Directorate: Higher Education and PQA will work out quality enhancement and enrichment programmes for grade 11 and grade 12 to supplement the normal teaching/learning in schools. These programmes will be of an extra-mural nature and have regional contact classes during school holidays. Guidance will be offered to learners in junior secondary grades; (h) for pre-entry programmes the MoE could include institutions such as TUSCIN and NAMCOL to offer programmes in the areas of languages, mathematics and science on a competitive basis using existing facilities; (i) expansion of the pre-entry programme at the Oshakati campus will be investigated and could be, depending on the feasibility of the strategic plan to be developed by UNAM, financially strengthened; and (j) for foundation programmes colleges of education, PON and UNAM would provide the service. It is envisaged that the pre-entry activities will run for a period of five years, while secondary education puts in place quality enhancement programmes in schools.

48. *Implementation*: The review of existing programmes will take place in 2006 to allow critical decisions, particularly related to budgeting, to be made as soon as possible. Modified or new programmes can be started soon thereafter, initially running in an *ad hoc* manner, making use, for example, of expatriate volunteer staff and local non-government interim funding.

49. *Outputs:* The expected outputs, evident from 2010/2011 onwards, and in many cases before, are: (a) significantly improved entry numbers to key programmes matching national targets; (b) dropout rates in science, engineering and technology reduced to below 10% overall; (c) an output from science-based programmes that shows a significant increase in the proportion of female graduates and increases in the numbers from the most disadvantaged groups; and (d) improved student support and counselling services.

Component 6. Improve the effectiveness and productivity of academic staff [N$19.5 million]

50. *Challenges:* Academic staff often do not have formal qualifications at a level sufficiently higher than the level at which they teach. In other cases academic staff have not been able to keep up with developments in their fields of expertise and their knowledge has become outdated. In addition, academic staff often do not have the skills necessary to do research, or - if they do - the time and resources to do research.

51. *Objectives*: The effectiveness and productivity of academic staff is raised in terms of research and teaching competencies through staff development programmes. The target would be to involve a percentage of staff at each institution annually in staff development activities.

52. *Component Description*: Academic capacity building and teaching skills will be developed as follows: The NCHE will establish a coordinating committee for staff development made up of members drawn from all tertiary institutions and the NCHE. The committee, with expert assistance, will develop guidelines for staff development at tertiary institutions. This will include setting priorities among the various disciplines, ideally based on the overall strategic plan for tertiary education, taking into account national priorities. Under the direction of the NCHE and the co-ordinating committee, and assisted by technical specialists, each tertiary education institution will: (a) establish standards and define performance criteria for teaching in key subjects; (b) conduct academic staff training needs analysis and use the results to guide staff development programmes; (c) prepare staff development programmes. These would cover both upgrading and periodic updating and could include such means as formal degree level training locally or, more likely, in SADC; short upgrading programmes locally or in SADC; sandwich programmes and block release; staff exchanges; attendance at international conferences deemed relevant; provision for access to international forums and journals; and mentoring by international or Namibian experts. The tertiary institutions and the Coordination Committee will monitor the implementation of the guidelines and evaluate the effectiveness of the staff development programmes. Staff development will be linked to performance appraisals, i.e. to promotions.

53. *Implementation*: The NCHE will have responsibility for overseeing implementation of the staff development programme through the Coordinating Committee. The management of each tertiary institution, including academic deans, would be responsible for meeting the targets established in the overall plan for each institution.

54. *Outputs and Indicators*: Expected outputs and indicators include: (a) formal qualifications of staff raised; (b) staff brought up-to-date with developments in fields of expertise; and (c) staff capacity to do research increased. Each of above is expected to contribute to teaching made more effective and an increase in quality of student achievements. *Indicators*: increase in qualifications; increase in research publications in peer reviewed journals; increase in teaching competence; improved learning achievements of students.

Component 7. Introduce quality assurance processes [N$2.1 million]

55. *Challenges:* Tertiary education and training is the pinnacle of any education system; it delivers highly qualified human resources in areas critical to national development. It is also the most expensive and prestigious. Quality assurance is essential to ensure outcomes that are internationally credible and nationally responsive and relevant. A key part for improving quality and relevance is a robust and internationally benchmarked quality system. Such a system safeguards quality of appointment, promotion, teaching, research and the employability of graduates. Currently quality assurance processes are either absent or deficient in the sense that they are not internationally benchmarked.

56. *Objectives:* Quality assurance processes institutionalised that improve the quality of academic staff, teaching, assessment and research at all tertiary education and training institutions. This in turn, will enhance the overall performance of tertiary education and training institutions and ensure their credibility nationally and internationally.

57. *Component description:* Every tertiary education and training institution will conduct a comprehensive audit of their existing quality assurance processes such as staff recruitment, appointment and appraisal systems, teaching evaluations by students, faculty advisory boards and examination assessment procedures, and amplify and improve these in line with international benchmarks. For this purpose, pre-audit activities will be carried out (inclusive of desk studies)

and a clear framework and terms of reference for the audits developed. Work teams will be identified to conduct the audits and to engage in stakeholder meetings. Audit reports will be prepared and their recommendations submitted to the appropriate decision-making bodies for discussion and action. The recommendations contained in each audit will be translated into work plans for monitored implementation and oversight by the NCHE and the NQA. (Components 2 and 3.)

58. *Implementation:* The review of existing quality assurance processes will be conducted by the Office of the Vice-Chancellor (Academic Affairs and Research), Faculty Deans and Senate (UNAM), the Vice-Rector (PoN) and the Rectors (colleges of education) in association with the NCHE and the NQA. The review process will take place in 2007/8 and improved and internationally benchmarked quality assurance systems will be implemented by 2009.

59. *Outputs:* Quality assurance processes/systems implemented. Academic and administrative staff brought up-to-date with improved quality systems. Each of the above contributes to improved internal efficiency, an increase in quality of student achievements (15% in completion rates, reduction in dropout for academic reasons) and enhanced integrity of the overall system at tertiary level.

Component 8. Diversify financing sources [N$3.2 million]

60. *Challenges*: Tertiary education is costly per student, in part because of lower weekly teaching hours by staff compared with lower levels of the education system, smaller average class sizes, higher average salaries and more extensive requirements for facilities, including student boarding. The costs of tertiary education are borne at present almost completely by the public budget. The beneficiaries (graduates in terms of higher earnings and enterprises in terms of qualified workers) pay little if any of the costs. Moreover, opportunities exist to generate income through research grants, consulting and renting of facilities. Public financing of education including tertiary education faces constraints in view of competing priorities, such as financing the health costs of HIV and AIDS. Tertiary education, in particular, will have to finance a larger share of its operating costs from non-government sources. A comprehensive study is needed to identify potential sources and examine their feasibility.

61. *Objectives.* (a) A plan for financial diversification is completed, based on a comprehensive analysis of alternative means of raising non-public revenue; (b) Policy decisions taken on recommendations; and (c) Implementation plan completed on the policy measures and implementation started.

62. *Component Description*: The study will analyse the following aspects: (a) Literature survey, particularly previous studies on the subject, with analysis of outcome of recommendations; (b) Determine the actual cost of various programmes in tertiary education by type of institution; (c) Analyse the beneficiary-incidence of present public financing of tertiary education; (d) Study the cost-benefit of student loans at present (costs of administration, amounts disbursed, vs. recovery rates and interest obtained); (e) Examine the feasibility of expanded student loans with better collection mechanisms and market (or subsidised) interest rates, and the costs of administration - compare the projected returns with the costs of outright scholarships and bursaries; (f) Explore the costs-benefits and feasibility of differentiated tuition; (g) Explore the feasibility of expanding for-fee courses in evenings and during vacations; (h) Identify the feasibility of introducing a phased cost-sharing system together with increased scholarships and bursaries targeted at low-income students; (i) Identify possibilities for resource mobilisation through research grants or outside consultancies; (j) Identify possibilities and feasibility of mobilising contributions from the private sector and private individuals, possibly to an endowment fund; (k) Introduce matching grants to encourage institutions to raise substantial proportions of their total expenditures; and (l) Analyse the equity implications of recommendations.

63. The success of the study would depend, *inter alia,* on the full co-operation of the tertiary institutions in supplying information and statistics to the technical assistance experts. (2006-2007). The study would present options and alternatives for consideration by the NCHE and government, with an analysis of advantages and disadvantages. Government would decide on a strategy for resource mobilisation, including cost sharing with beneficiaries, raising income from the private sector and generation of own income by tertiary institutions (2008). Based on decisions by Government and NCHE, the experts would prepare a comprehensive plan, programme and implementation schedule for non-public resource mobilisation with full costing. This could include progressive implementation of cost recovery; undertaking campaigns to raise funds from private individuals and companies. Implementation of the policy measures is expected to start during ETSIP phase 1 (2009).

64. *Implementation*: The study would be implemented under the auspices of the NCHE, and would be directed by a steering committee composed of members of the tertiary institutions and the Ministries of Education and Finance. The experts would be assisted by the registrars and financial staff from each of the tertiary institutions. The NCHE would review the results and recommendations of the study, and recommend to the MoE a plan for increasing non-public resource mobilisation for tertiary education. It should be noted that the bulk of this component will be commissioned by the NCHE. The implementation will be done by the institutions.

65. *Outputs*: The component is expected to produce the following outputs: (a) Analysis of existing costs for various programmes in tertiary education; (b) identification of beneficiary-incidence of present tertiary public funding; (c) identification and analysis of the costs-benefits of various means of raising non-public revenue, including student loans; (d) based on government decisions, a full plan prepared for introduction of accepted revenue raising measures; (e) resource mobilisation offices established; (f) improved accountability for the use of resources mobilised by institutions; (g) a feasibility study undertaken to determine the progressive increase in the budget share of own source-revenues; and (h) implementation of policy measures stated.

Component 9. Efficient resource use [N$1.1 million]

66. *Challenges*: There are two ways to increase resources for priority activities: raise additional funds and make more efficient use of existing resources. For example, for the same amount of expenditure more students could be enrolled through the adoption of efficiency measures. Evidence of inefficient use of resources at present include high repetition and dropout rates from tertiary institutions, in some cases small department and class sizes and underutilisation of some facilities. As an example, the ratio of teaching staff to students is 1:12 in colleges of education compared with international norms which are more like 1:20.

67. *Objectives:* Study completed that: (a) identifies the main sources of inefficiency at present, and (b) proposes a workable plan for overcoming the causes of inefficiency; (c) Specific efficiency measures implemented, including normative financing; and (d) greater productivity in tertiary education, e.g. more students graduated from tertiary institutions for the same unit cost as at present.

68. *Content Description*: The component involves three parts: an initial study to document the extent of inefficiency in resources use; a plan for overcoming identified problems and making better use of resources; and the introduction of normative financing. Each is explained in sequence below.

69. Study the scope and extent for increased efficiency. This will include the following analysis: (a) Determination of repetition and dropout rates and their causes; in this context the validity of the assessment framework and lack of standard assessment framework will be examined as a contributor to student repetition and dropouts; (b) Determination of operating costs per student by field of study and especially recurrent costs per successful graduate (and establishment of baseline of costs per student and graduate), and identification of the principal drivers of student unit costs – e.g. ratio of teaching staff to students; (c) Determination of usage factors for physical facilities,

including classrooms, laboratories and dormitories; (d) Comparisons of unit costs for similar programmes across institutions.

70. The success of the first phase depends crucially on the availability of data. Based on the analysis of efficiency, the study will examine, evaluate and propose alternative ways of making more efficient use of resources, including measures to reduce repetition and dropout rates. The proposals will spell out all requirements and implementation costs. For example, a requirement could be considered that all proposals for new programmes include a rigorous analysis of cost implications, both capital and recurrent. In addition, greater use of distance teaching (e.g. in teacher education) could help reduce unit costs per graduate.

71. Introduce normative financing as a means to provide incentives to institutions to economise in the use of resources. This will entail the following steps: (a) Establish baseline costs per programme and institution (see above); (b) Examine previous studies and recommendations on normative financing; analyse the current funding formulas used within UNAM and PoN; examine alternative formulas and norms for allocations from the government to tertiary institutions; and simulate their cost/enrolment implications - including stakeholder participation; (c) Adopt a funding formula that reflects national development priorities; (d) Prepare a phased implementation plan; (e) Train staff in the use of formula funding; (f) Establish data collection and reporting method; and (f) Monitor implementation, implications and effects of the formula funding.

72. *Implementation*: The study would be conducted under the auspices of the NCHE, under the specific direction of a Steering Committee named by the NCHE and composed of representatives of key tertiary education institutions. One or more persons will be assigned from each tertiary institution to work with the team on an on-demand basis.

73. *Outputs and Indicators*: (a) Written identification of the various sources and aspects of inefficient resource use and their causes; (b) written presentation of alternative means of increasing efficiency in tertiary education, and implementation costs/requirements; (c) plan of specific measures adopted to improve efficiency (including measures to reduce repetition and dropout, increase the average number of students per faculty and increase the utilisation rates of physical facilities); (d) plan written for implementation of normative financing; (e) normative financing implemented (as evidenced by monitoring and evaluation); (f) costs per graduate reduced (unit cost comparisons over time).

Note: N$29 million has been budgeted to absorb the increased throughputs into tertiary education as a result of the expansion of secondary education which is one of the priorities of ETSIP.

Note: Once the NCHE and ACTET are operational and functioning as envisioned, this sub-programme will be reviewed and adjusted.

KNOWLEDGE CREATION AND INNOVATION [N$29.6 million]

Background

1. Knowledge, technology, skills, and the interaction thereof have become more critical determinants of economic growth than traditional factors of production - land, capital, and labour. Over the past three decades production has become increasingly more knowledge-intensive as investments in intangibles such as research and development (R&D), software, product design, process engineering, quality control, testing, training, marketing and management have come to play a greater role in the production of goods and services. Gradually the knowledge intensity of production has extended beyond the high technology sectors to reshape a broad spectrum of traditional industries.

2. As production becomes more knowledge intensive, firms compete not only on pricing, but also on their ability to innovate. The dismantling of traditional barriers to trade and investment has also facilitated the diffusion of innovation-based competition around the globe. These changes have put pressure on local firms in developing countries to engage in a process of continuous innovation for which they are ill prepared. In the case of Namibia, firms lack the skilled labour required to enable them to apply knowledge and technology to improve methods of production, experiment with new products and engage in higher value-added productivity. Labour market surveys and global competitiveness ratings confirm this constraint. The lack of skilled labour tends to make Namibia attract Foreign Development Investments (FDIs) that are at the lower end of the global production chain, and which have no incentive to train their staff and/or to invest in R&D. Other than the lack of skilled labour, Namibian firms, in particular SME's, lack high-level knowledge workers who could lead firm-level R&D. This in turn has challenged governments to develop policies to stimulate and support a process of innovation.

3. Cognisant of these limitations, Vision 2030 highlights knowledge and technology as critical drivers of economic growth and social development. Namibia plans to build on its strengths, and to turn its potential comparative advantage into competitive advantage. Current potential advantage includes an enabling macro environment, rich natural resource base, fairly developed infrastructure, and the recognition of the role of knowledge, innovation and technology as key drivers of development.

4. This sub-programme focuses on the development of an effective national science, knowledge creation and innovation system that can strengthen the national science and technology system as well as foster the strategic linkages between the creation of knowledge and its use in production.

Achievements

5. Efforts to strengthen/create the policy, legal, institutional and financing frameworks that are required to facilitate science, knowledge creation and innovation are in progress. The National Policy on Research, Science and Technology as well as the Policy on Biosafety and Biotechnology was adopted by Cabinet in 1999. The Research, Science and Technology Act that enabled the creation of the National Commission on Research, Science and Technology (NCRST) that will house the National Research, Science and Technology Fund (NRSTF) was enacted in 2004. Substantial work has been completed on the conceptualisation of the Centre for Innovation, Entrepreneurship and Technology (CIET).

6. Namibia also has an emerging knowledge base on which a knowledge and innovation system can be built. This includes the research and consultancy wings of tertiary education and training institutions, research departments of government ministries, independent research and consultancy firms and individual researchers. The primary focus of these knowledge creation nodes is basic research, in a narrow scope of disciplines, while very limited applied research takes place.

7. The Government of Namibia has recently developed the National Research, Science and Technology Policy aimed at developing and managing Namibia's scientific human and institutional

base. The successful implementation of the policy will lead to (a) an increase in scientific human and institutional capacity; (b) enhanced efficiency in resource utilisation and value addition; and (c) enhanced coordination and management of knowledge creation, in particular its effectiveness. The successful implementation of the policy is a pre-requisite for the effective development and implementation of the National Innovation System.

Challenges

8. One of the key challenges lies in the capacity of these emerging knowledge and innovation nodes to produce knowledge that is relevant to Namibia's growth potential. A significant explanation for this low capacity is the failure of tertiary education and training institutions to produce graduates that can effectively contribute to knowledge creation and management. Even more so, is the inadequate contribution of the academics of these institutions to knowledge creation and application. Added to weaknesses on the supply side, is a weak demand for knowledge by the productive sector. Most production centres are branch plants of centres located outside of the borders of Namibia. The research and development work of these branch plants is carried out at the centres located outside of Namibia thus there is limited demand for Namibian knowledge and innovation. Furthermore given the low level of education and training, Namibian Firms in particular SME's are not able to present their production failures as knowledge and technology needs. Without effective knowledge and technology brokerage, these producers do not have intermediaries that could link them to the relevant supply of knowledge. Within the formal sector, there is a stark dearth of firm level R&D programmes that could actually apply knowledge to improve productivity. The challenges therefore are: (a) the lack of a system for identifying sectors whose productivity is constrained by the lack of relevant knowledge and technology; (b) the lack of a national system for the coordination and development of science and research capacity, and (c) the lack of a system for linking knowledge demand to effective supply of knowledge.

Priorities

Component 1: Strengthening the policy and legal environment to support knowledge creation and innovation
Component 2: Strengthening capacity for the effective coordination of the NKIS
Component 3: Strengthening effective demand for knowledge and innovation

Component Descriptions

Component 1. Strengthening the policy and legal environment to support knowledge and innovation [N$2.5 million]

9. *Challenges:* Related policies that could complement each other in supporting a national knowledge and innovation system either are not all in place or even if they exist are not complementary. Therefore there is need that the industrial policy, labour policy and research policies at the institutional level are in place and complementary. Furthermore, the legal framework that should enact these policies is not comprehensive enough.

10. *Objectives*: The objective of this component is to develop a set of policies and legal instruments that provide a coherent incentive structure for knowledge creation and its up-take by users. It is designed to create an environment conducive to the overall coordination and management of the National Knowledge and Innovation System (NKIS).

11. *Component description***:** This component is intended to (a) review existing policies to check their consistency with the national strategic goal of transforming into a KBE through heightened application of knowledge in production; (b) revise policies; and (c) draft policies that are not yet in place.

12. A large number of policies affect the processes of knowledge creation and innovation. Reviewing existing policies of relevance to the NKIS and analysing policies and practices with regard to the NKIS in selected other countries will provide the basis for drafting a framework policy. A dialogue among Ministries and other stakeholders through the National Commission on Research, Science and Technology (NCRST) would ensure that the policy framework accords comparable status to all types of knowledge and knowledge systems and that it is consistent with the national strategy of moving towards a knowledge-based economy. A national consultative workshop would then enable the framers to broaden the range of stakeholder inputs prior to finalising the draft for submission to the Minister of Education and to Cabinet. The major cost for this component will be costs to review the NKIS framework, including existing policies and developing new policies to fill the gaps identified. As a cost-cutting measure, the policies identified in the review process will be prioritised and aligned and developed according to this prioritisation.

13. In addition to setting the policy framework for the NKIS, this component will review the research policy that is currently under development as well as existing policies in other domains of relevance to the NKIS to ensure their coherence with the framework policy. The review process will also serve to identify areas where policies will need to be developed and legal frameworks put in place or updated to give these policies effective status. Technical assistance will be sought where this is needed.

14. *Implementation*: The NCRST will implement the component under the guidance of the MoE.

15. *Outputs and indicators:* The outputs will be*:* (a) Framework Policy drafted; (b) two policies reviewed to ensure coherence, and (c) two new policies drafted to fill gaps identified. Indicators will include: (i) report on review of existing policies relevant to the Framework Policy; (ii) meeting held between stakeholders; (iii) report on national consultative workshop; (iv) draft policy documents; (v) policies submitted to Cabinet; and (vi) report on review of existing policies relevant to the Framework Policy.

Component 2. Strengthening capacity for the effective coordination of the NKIS [N$17.8million]

16. *Challenges***:** The knowledge creation and innovation system has a very weak capacity for coordination and support. This lack of coordination and support leads to other issues. First is that ongoing efforts and locally produced knowledge are not well recorded or organised. Second, the potential applicability of this knowledge is lost because it is not known nor is it easily accessible. Third, there is no clear system of identifying knowledge of strategic development importance and once identified, there is no system for communicating these needs to potential knowledge creators.

17. Furthermore, there is inadequate funding for knowledge creation and application across the board: at the level of the government, tertiary institutions and private firms; as well as very limited competitive financing for individual researchers. The net effect is that production of knowledge is constrained.

18. *Objectives*: The purpose of this component is to establish the key institutions needed to effectively coordinate the NKIS. The NCRST, a key institution that houses the National Research, Science and Technology Fund (NRSTF), will be created in the first phase. The NCRST has been designated by the Research, Science and Technology Act, 2004 as the organisation responsible for the coordination, monitoring and supervision of research, science and technology and the provision of policy guidance to the research, science and technology innovation systems in Namibia. The NRSTF under the NCRST will be used as a financing mechanism for research and development, and for the creation of appropriate institutional and organisational arrangements for the proper functioning of the NCRST.

19. *Component description***:** This component includes all activities needed to establish the NCRST, including the development of criteria for the selection of commissioners, the preparation of a human resources manual and the financial procedures and policies for its secretariat and the identification and

rental of physical facilities for its secretariat. A series of training workshops in the design and evaluation of innovation policies will foster a common language and understanding of the NKIS across the government, other stakeholders and within the NCRST and its subsidiary bodies. The appropriate methodology for monitoring the quality and relevance of knowledge outputs as well as information management system for diverse knowledge and innovation sub-sectors will be developed.

20. The National Research, Science and Technology Fund is to be established within the NCRST which sets the policy for and oversees its activities. It is designed to improve the allocation of resources to support knowledge and innovation and increase the relevance of research to users. Among its principal activities will be the provision of research grants, loans, and similar financial aid in research, science and technology. Priorities for the NRSTF will be set by the NCRST at three-year intervals. One of the first steps in the establishment of the fund is to undertake a study of best practices in National Research Financing and to design appropriate procedures, financing strategies, as well as monitoring and evaluation tools. Creation of the oversight committee as stated in the Research, Science and Technology Act, 2004 and selection and recruitment of support staff for the fund would also take place prior to initiating the Fund's research support activities.

21. *Implementation*: The Directorate of Research, Science and Technology will implement the component.

22. *Outputs and indicators:* The NCRST is established by 2007. (Indicators: regulations in place, HR Manual in place, financial procedures in place, commissioners recruited, secretariat appointed, physical facilities identified, report on best practices studies, report on procedures, organisational design, financial strategies monitoring and manager and support staff appointed.)

Component 3. **Strengthening effective demand for knowledge and innovation [N$9.2million]**

23. *Challenges:* There is a need to link real demand to the relevant supply. Currently there is no mechanism through which producers, in particular SME's, can be assisted to articulate their production failure as knowledge and technology needs. There should also be some support system to follow up on the use and on the yield to productivity. Once this is done they are empowered to buy that knowledge and technology through some funding mechanism. Last but not least, a mechanism is needed through which small and medium-sized enterprises, which are the hubs of production, can push economic growth and also meet the social equity goal.

24. *Objective*: The objective of this component is (a) the establishment of CIET; (b) the systematisation of identification of knowledge gaps; (c) provision of support to knowledge users; and (d) linking knowledge suppliers with knowledge users

25. *Component description:* As a means to strengthen effective demand for knowledge, this component would further develop the conceptualisation of CIET. CIET will stimulate, facilitate and promote innovation and entrepreneurship and provide organisational, technical, scientific, market advice and training to support the development of local enterprises, in particular the small and medium-sized enterprises in Namibia. CIET would also support the process of identifying higher value added production opportunities in Namibia and function as a knowledge broker, linking knowledge suppliers to different types of users in pursuit of this objective.

26. Some of the activities to be carried out under this component would include the following: With the aid of international technical assistance, the elaboration and articulation of the CIET concept, its function and role and development of its institutional and organisational structure will be undertaken. Technical assistance will also be sought to design an industrial and innovation survey, along the lines currently being developed within NEPAD, to train the researchers who will carry it out and analyse the data. These data will provide inputs for the development of relevant training to help small and medium-sized enterprises to identify their needs for knowledge and the activities that will support their ability to innovate. A prioritisation of other activities to deal with upgrading to higher value-

added production in critical sectors such as fishing, husbandry, mining and tourism will also be undertaken. Local and international networks will be developed as a means to strengthen capacity within CIET for carrying out its activities. The outcome of CIET activities will inform policy development.

27. *Implementation*: The NCRST will implement the component under the guidance of the MoE.

28. *Outputs and indicators:* The output of this component is that CIET is established by 2011. Indicators are: CIET concept articulated, functions and role of CIET articulated, institutional and organisational structure developed, resource requirements identified, legislation developed, HR Manuals developed, financial policies and manuals developed, Board members elected, CEO and technical staff appointed, premises, physical facilities and equipment acquired and industrial and innovation survey conducted.

Links with the Tertiary Education and Training Sub-programme

29. In strengthening the productive capacity of the NKIS, a steady supply of high-level researchers coming from the tertiary education sector and skilled technicians from the Polytechnic of Namibia and artisans from vocational training centres will be required. Within ETSIP, opportunities to interface this sub-programme with tertiary education and vocational education and training has reduced the risks of a supply failure, though there is likely to be a lag in the number of researchers produced by the system in the short term. It is possible to close this gap by using foreign technical assistance. Although ETSIP concentrates on the integration of ICT as a tool to enhance learning and teaching, a need exists to better integrate this with higher level skills production from Tertiary Education and the enhance management and development of the technology by the private sector.

INFORMATION, ADULT AND LIFELONG LEARNING

[N$119.1 million]

Background

1. Adult learning and access to relevant information are indispensable contributors to an education that is not limited and tied to formal education. They provide a framework for education and self-education activities at work and in the wider society, within and beyond the classroom, the curriculum and examinations. Social and economic development requires an enabling environment of information provision and management as well as a functional adult education system.

2. This sub-programme addresses the needs of the workers and the un-employed, open and distance students, learners from pre-primary to tertiary level, citizens without educational qualifications and skills, researchers, small entrepreneurs and disadvantaged groups in the society through revised and expanded adult education programmes and more equal and improved access to information and learning resources.

3. The library and information service sector has been globally recognised as a critically important support structure for education, research, knowledge creation, public administration and economic development in knowledge based economies. The necessity to develop the Namibian library and information service sector in view of the KBE is clearly recognised in Vision 2030. This sector has been revolutionised by the use of ICT for information management and the emergence of the internet. Online information has the potential to provide fast, widespread and cost-effective access to an unlimited amount of knowledge. The main problem remains the unequal distribution of access facilities to tap these information and learning resources based on economical and regional inequalities. Libraries, which exist as a free and generally available information service network throughout the country, are the obvious choice for public access points to overcome the digital divide. The ICT Policy in Education and the E-Governance Policy for the Public Service recognise this role for the libraries and the necessity to act on it.

4. The expansion of access to education has created a need for libraries as study centres. In the previously disadvantaged regions and localities the community library users are mainly primary and secondary school learners and open and distance students. This is a general phenomenon on public/community library usage in African countries – they are clearly a support network for the education sector.

5. In this context, this sub-programme will redress inequalities in access to knowledge and learning resources, thus empowering and un-tapping the human potential of the disadvantaged regions and social groups on the way to a learning society and knowledge-based economy.

Achievements

6. *Adult education:* Launched in 1992, the National Literacy Programme (NLP) in Namibia has enrolled 30 000 – 40 000 adult learners per annum in a programme that now includes three stages of basic literacy (roughly equivalent to a lower primary education) and an adult upper primary education certificate. About 70% of participants have been women, leading to specific efforts to increase the number of male participants. On average more than 55% of those enrolled have written and passed end-of-year tests. In recent years the literacy programme has diversified to include (a) Adult Skills Development for Self-Employment; (b) Community Learning and Development Centres; and (c) Family Literacy. In 2004 a National Policy on Adult Learning was adopted.

7. Established by law in 1997 as a semi-autonomous institution, the Namibian College of Open Learning (NAMCOL) attracts 25 000 – 30 000 learners per year to its alternative secondary education programme. NAMCOL learners write the same examinations as those in formal

education, and the rate of improvement of their results has been significantly better than in formal education. NAMCOL has developed high quality localised instruction materials and is generally acknowledged to be a well-managed institution. It is now venturing into computer training and a few professional courses.

8. *Library and information service sector*: Namibia has a network of library and information centres, which has been continuously expanded to cover the previously disadvantaged regions. The network consists of national, special/scientific, academic, educational and community libraries, including also the National Archives. A legal framework exists for staffing and budgeting to sustain this network and facilitate countrywide access to information and study resources as well as for public access, custody and care of official records.

Challenges

9. *Adult education:* With adult literacy rates in Namibia having reached 83% by the year 2003, there appears to be a need for a more widely based adult learning programme that nevertheless still supports the disadvantaged in their efforts to work their way out of poverty. Closer synergies with formal education are being sought. There is a need for an overarching policy on lifelong learning as Namibia pursues its intention of becoming a learning nation.

10. *Library and information service sector:* Access to knowledge and information to all Namibians as required by a KBE, would entail the library and information service network and knowledge management systems to be upgraded and refocused to serve the new economy. This would include expansion of ICT access points to the public, developing new methods and tools and repositioning itself to deliver, countrywide, locally and externally created knowledge to support education, lifelong learning, research, employment creation and production in the new economy.

Priorities

11. The most critical areas to address are outdated policies and legislative and regulatory frameworks that hinder responsiveness to the changing society and requirements of Vision 2030, large inequalities in access to relevant leaning and information resources and strategies to widen and improve access to adult education programmes. The supporting priority is to upgrade knowledge management systems to improve access and maintenance of nationally relevant knowledge, a key requirement for democratic and efficient administration, research, quality education and lifelong learning.

Priority components

Strategic objective A: Ensure that adult and lifelong learning and information service sector programmes are relevant and responsive to the needs of a learning society

Component 1: Strengthen the policy and legal framework for information and lifelong learning

Strategic objectives B, C and E: Expand equitable access to quality information and lifelong learning programmes

Component 2: Improve equity and access to high quality lifelong learning opportunities
Component 3: Improve and strengthen equitable access to information and learning resources

Strategic objective E: Strengthen all information institutions

Component 4: Quality and effectiveness of knowledge management systems

(Note: Only the above mentioned strategic objectives of the 15-year ETSIP Strategic Plan will be covered in the first phase of implementation. The others will be dealt with in subsequent phases. Strategic Objective D was incorporated in the Vocational Training and General Education Sub-Programmes.)

Component 1. Strengthen the policy and legal framework for information and lifelong learning [N$7.2 million]

12. *Challenges:* Several policies and laws for information and lifelong learning institutions need to be revised in view of the changed circumstances from the early years of independence when they were formulated. The information service sector needs to be re-assessed to establish its necessary preparedness for a knowledge based economy.

13. *Objectives:* The IALL policies and legal framework are strengthened following a review to identify gaps and weaknesses. The policies relating to the following are revised and operationalised: (a) the national library and information service sector; (b) the archives policy and legal framework; (c) the legal framework and funding formula for grants to NAMCOL; (d) the National Literacy Programme; (e) establishment of the Council on Adult Learning; and (f) development of national policy on lifelong learning.

14. *Component Description: Adult education:* The 2003 national policy on adult learning is to be taken further through legislation which will establish the Council on Adult Learning envisaged in the policy to galvanise the many and varied providers of adult learning in a coordinated national drive to increase adult learning. A national policy on lifelong learning is also to be developed as a means of more closely integrating all components of education and economic development at local, regional and national levels. Adult learning programmes are to be strengthened through a comprehensive evaluation of the operation of the National Literacy Programme and subsequent actions. The programme is to be evaluated and its policy revised. A particular focus will be workplace literacy.

15. On the basis of a study to be carried out, the funding formula for grants to NAMCOL is to be reviewed and re-negotiated. The NAMCOL Act of 1997 is also to be amended.

16. *Library and information service sector*: Assessment of the overall library and information service sector needs to be carried out to establish the preparedness of this sector for the KBE, including identifying what is required for the sector to deliver value added products and services and the roles of the information workers in a KBE. It is also critical to analyse and revise the existing infrastructure, policies and legal framework in order to facilitate the strategic objectives of equity, efficiency, quality and pro-poor approach in line with Vision 2030.

17. The current legislation on public records management in the form of the Archives Act and its regulations is outdated and does not provide the necessary legislative framework for the challenges of e-governance and electronic records. The Archives policies and legislative framework are to be reviewed and revised.

18. *Implementation*. The adult education policy reviews will be carried out by the Directorate: Adult Basic Education (DABE) together with, as appropriate, the board of NAMCOL. The Directorate: Library and Archives Service will carry out the assessment and policy review of the library and information service sector assisted by professional researchers. Revision of the Archives Act will be done by a professional team established by the National Archives.

19. *Outputs and Indicators:* Strategic assessment and revised policy and strategy of the national library and information service sector in line with Vision 2030. Revised Archives policy and legal framework. Evaluation of and revised policy for the National Literacy programme. Policy documents for adult education and lifelong learning. NAMCOL Act amended. Establishment of National Council on Adult Learning.

Component 2*:* Improve equity and access to high quality lifelong learning opportunities [N$43.3 million]

20. *Challenges:* The quality of adult education and training programmes is vital for their credibility and success. Another challenge is responsiveness to labour market and employment needs to actually support the out of school adult population in income creation and active citizen skills. With adult literacy rate in Namibia having reached 83% by the year 2003, there appears to be a need for a more widely based learning programme that nevertheless still supports the disadvantaged in their efforts to work their way out of poverty. Closer synergies with formal education are being sought. The main challenges are: (a). an overarching policy on lifelong learning as Namibia pursues its intention of becoming a learning nation; (b) reaching 90% adult literacy by 2015; (c) setting standards for the Adult Upper Primary Education curriculum and literacy programme; (d) developing materials that are accessible to the visual impaired (Braille); (e). to have 56 Community Learning and Development Centres, incorporating public library and fully equipped with ICT in all 13 educational regions by 2015; (f) to expand the ASDSE project to all the 13 educational regions; and (g) to have family literacy centres in all districts in Namibia.

21. *Objectives:* The National Literacy Programme is improved through: (a) improved planning; (b) adult skills development for self-employment extended to all regions with assistance of other partners; (c) increased support for NGOs engaged in adult learning; (d) improved and extended multi-purpose community learning and development centres of various kinds, including support to ICTs with additional partners. Targeted reading skills improvement campaigns are carried out to address reading skills problems at primary school level based on SACMEQ results. Regions, cities, towns and villages have integrated plans for education and development. Participation of marginalised groups in lifelong learning is increased through strategies such as family literacy programmes. Adult literacy qualifications are recognised by the NQA.

22. *Component Description*: The National Literacy Programme in Namibia (NLPN) is an integral part of the national education system and part of the four major national education goals. To enhance the quality and get formal accreditation for adult education programmes, the curriculum of the NLPN is to be revised, starting with the establishment of literacy qualifications under the NQF. Among the changes envisaged is an emphasis on relevant workplace literacy and entrepreneurial skills. The planning of the NLPN is to be improved by making better use of demographic information with a particular focus on workplace literacy. The family literacy programme is to be extended to more disadvantaged communities to enhance the interest of parents in their children's future and increase the self-confidence and interest in learning of the adults. Another programme targeting learning capacities of children from disadvantaged families is a multi-sectoral reading skills campaign developed by NLAS in co-operation with DABE and the formal education sector. The *Adult Skills Development for Self-Employment Programme* is to be extended to all regions of the country. Workplace literacy programmes are to be promoted through a code of good practice and incentives. Partnerships for learning are to be developed with the organisations of people with disabilities, marginalized groups and remote area dwellers. A few towns or regions are to be assisted to develop integrated plans for education and economic development.

23. The 14 Community Learning Centres, which through cooperation with the Library and Archives Service will continue to incorporate a community library, are to be improved and to receive more learning resources, including computers. Educational radio programmes are to be developed through a studio administrated by NAMCOL as a joint venture of NAMCOL and tertiary institutions. The radio studio will be consolidated to become a qualified and sustainable education radio production entity supporting formal, vocational, tertiary and lifelong education and training programmes.

24. NAMCOL will diversify its programmes and make them more relevant to the needs of the education system and the economy (in view of the planned reduction in the number of learners seeking a second chance at secondary education in terms of the General Education Sub-programme).

25. *Implementation*: This component is to be implemented by DABE and NAMCOL. ICT programmes are to be implemented in cooperation with the ICT division in the MoE. The reading skills campaigns are to be implemented by NLAS and the regional librarians in cooperation with DABE and the formal education sector.

26. *Outputs and Indicators:* The principal output of this component is an increased number of participants in the National Literacy Programme. This will be evident through increased numbers of (a) firms that have literacy programmes in place and functioning; (b) campaigns and public participating in events; (c) learning regions/towns/villages; (d) hours of educational broadcasting per week; (e) schools where family literacy programmes are available. The new curriculum is developed, implemented and the qualification recognised by the NQA.

Component 3: Improve and strengthen equitable access to information and learning resources [N$63.4 million]

27. *Challenges:* The nationwide library network is struggling with inadequate resources to respond to the demand for up-to-date information and educational resources for resource based education, open and distance programmes, research and information requests from community members. Wider and more equal access to information and learning resources countrywide could be provided by making use of international and national electronic information resources. To achieve this, the currently ill-equipped community libraries need to be upgraded to enhance internet connectivity and public ICT access. The social reality in the formally disadvantaged areas of the country has also defined a need for a new concept for the community libraries as multipurpose community information and study centres. The physical facilities, mostly inherited from the pre-independence era, need to be assessed and upgraded to provide the necessary support for the learners and students who are the main users of the countrywide community library network. A further challenge is the need for qualified staff and adequate infrastructure for decentralisation, regionally based development and support for the school and community library network.

28. Online information has the potential to provide fast, wide-spread and cost-effective access to an unlimited amount of knowledge. With public access points and national portals and support systems it provides an enormous means to improve equality in access to information and learning resources, support to SMEs and informal economy, decentralised research and innovation opportunities. The main problem remains the unequal distribution of access facilities to tap these information and learning resources – wide digital divide based on economical and regional inequalities. Libraries, which exist as a free and generally available information service network throughout the country, are the obvious choice for public access points to overcome the digital divide. The ICT Policy in Education and the E-Governance Policy for the Public Service recognise this role for the libraries and the necessity to act on it.

29. In addressing the need for a skilled labour force in Namibia, several problem areas have been identified including low reading skills levels, problems in mathematics and science capacity and lacking capacity to find and use information in tertiary education, research work related tasks, planning and administration. Functional and nationwide public library network and committed and qualified library and information service professionals are the key to information literacy skills and information resources required by the competitive knowledge based economy. National library and information service sector audit confirmed the existence of high level staff commitment as well as need for adequate library services. The IALL programme is addressing the identified problems to upgrade the sector to a level that will contribute to improvement of educational outcomes and nationally relevant information provision.

30. *Objectives:* This component will redress inequalities in access to knowledge and learning resources, thus empowering and un-tapping the human potential of the disadvantaged regions and social groups on the way to an information society and knowledge-based economy. This

component aims to: (a) redress countrywide inequalities in access to meaningful information and learning resources; (b) support resource based education; (c) support open and distance study opportunities; (d) promote ICT literacy; (e) create local expertise for the creation, dissemination and management of nationally relevant electronic information; (f) establish nationally relevant "multipurpose information and study centre" library model (g) create adequate decentralised school and community library support and development infrastructure through regional libraries in disadvantaged regions/areas.

31. *Component Description*: The first part of this component, the e-library programme, addresses the widening digital divide in access to information and learning resources and aims to upgrade the countrywide library network to respond to the basic requirement of Vision 2030. It widens the scope of the traditional community libraries by improving response to the need for multipurpose information and study centres. Libraries, which exist as a free and generally available information service network throughout the country, are the obvious choice for public access points to overcome the digital divide and provide more equal countrywide access to electronic information and learning resources. The beneficiaries will be the geographically and economically disadvantaged groups of the society.

32. Open and distance learning is acknowledged as a socially and economically important educational channel on the individual and national level in Namibia. Up to 50% of tertiary education students study through distance education. Over 28 000 secondary level students study through NAMCOL. Distance education relies more and more on electronic communication and learning resources. Without public access to ICT through libraries this option and other national and international e-learning resources will only benefit a privileged few.

33. Priorities would be set for the first 30 libraries and later phasing in all 60 national/regional and community libraries. Planning, connectivity infrastructure and deployment will be carried out in accordance with and as part of the cross-sectoral ICT in Education Sub-Programme. To ensure technical sustainability and optimal use of the ICT access points for the benefit of the communities, staff capacity building will include training in ICT maintenance and troubleshooting as well as advanced skills in educational use of internet. Physical facilities will be upgraded to secure safe conditions for equipment. The E-library programme will respond to Vision 2030 and the national ICT policies in establishing nationwide public ICT access points using the existing library network. (Implementation and funding allocation through ICT for Education sub-programme: Component 3, Point 9).

34. The other part of the E-library programme will address more equal access to nationally crucial information through digital content creation and management. Development in electronic resources has created an urgent need to develop national expertise in the library and information sector for optimal use of electronic information and digital collections as a tool for improved equity.

35. Professional capacity building in this field will also contribute to the process of digitisation and electronic dissemination of paper based local content for wider access to relevant national information which is necessary to support study, teaching, career development, legal practices and legal rights and for making well informed decisions in planning and development.

36. The second part of this component responds to need for a regional structures and local professional capacity to ensure and develop more equitable access to information and learning resources. This component would ensure that a decentralised regional structure is established to guarantee sustainability of the service to the grassroots' community. During the first phase of ETSIP, three regional libraries would be established. The location and design of these libraries will be planned to benefit the identified low income and disadvantaged groups in the community. These regional libraries will provide coordination, enhance networking and resource sharing and facilitate mobile book services to schools and communities. They will also provide adequate facilities to function as deposit centres for all documentation published in and about Namibia

(policies, consultancy reports, legislations, statistics, monographs and periodicals) as well relevant technical and economical materials to facilitate research, innovation, studying and administration as a regional resource centre. Solar energy solutions will be investigated as power source and if proved feasible will provide for considerable savings in energy costs. This component will also improve professional capacity to provide for local specialised expertise in educational and productive use of national and international sources of knowledge and information.

37. *Implementation*: The Directorate of Library and Archives Service [NLAS] will implement this component. The E-library programme will be carried out with the ICT division in the MoE within the ETSIP ICT sub-programme. The MoE regional offices, especially the regional librarians, together with the NLAS team, will supervise the implementation of the programme at the regional level.

38. *Outputs and indicators:* These activities form part of concerted efforts to address reasons for social inequalities in a crucial area which is access to survival information and study and learning resources on equal basis combating social and economical differences. The main outcomes will be (a) a countrywide public ICT access point network enhancing electronic information and educational resources and e-governance through community libraries; (b) internet resources used in libraries by learners, SME entrepreneurs and citizens for productive communication and information retrieval; (c) a communication and educational resources network for open and distance students established through the library network; (d) sustainability and efficiency of the infrastructure ensured by affordable and fast internet connection; (e) ICT literacy and training enhanced through the library network; (f) local expertise for information and knowledge management and service delivery including creation, dissemination and management of nationally relevant electronic information; (g) adequate and well resources study centre libraries serving and contributing to better educational outcomes in three disadvantaged locations; and (i) an adequate regional library to support the integrated school and community library network development functions in three regions.

Component 4. Quality and effectiveness of knowledge management systems [N$5.1 million]

39. *Challenges:* In a KBE, institutions need to be learning institutions with the capacity to change and to maintain adequate information management systems. Adequate information management in the public service is increasingly recognised as the cornerstone of maintaining transparency, accountability and institutional memory for efficient administration. However, the management of public records is lagging behind in relation to the fast technological development and may result in the loss of institutional memory and means of accountability in a democratic society. Preservation of historically important knowledge, documented records and national heritage is in danger because of lack of adequate facilities and equipment.

40. *Objectives*: This component aims to: (a) improve the national capacity and tools for management and the availability of knowledge, information and learning resources to facilitate education, research, economic and social advancement; and (b) ensure efficiency and effectiveness and support for good governance, transparency and accountability in the public service.

41. *Component description:* The critical area of this component is information management systems in public institutions. Policies and tools for records management in public institutions will be revised and updated to maintain transparency, accountability, citizen's rights and institutional memory for efficient administration and democratic processes. A policy and tools for electronic records management will be developed in co-operation with the Office of the Prime Minister.

42. New national knowledge management tools will be developed to improve the use of databases in information management.

43. The challenge for the National Archives to ensure the preservation of the historically important national heritage documentation will be addressed by establishing adequate physical facilities and staff capacity. Work has already started in developing and evaluating specifications to establish a national preservation laboratory to save photos, films and other historically important documents in danger of being lost because of disintegrating materials or obsolete technologies. The preservation facility will serve the needs of all scientific and other institutions as well as individuals throughout the country by providing adequate expertise and tools to preserve endangered historically important documents.

44. *Implementation*: The Directorate of Library and Archives Service will be responsible for implementing this component. Main responsible institutions will be the National Library and the National Archives. The National Archives will be in charge of the records management programme in co-operation with the OPM.

45. *Outputs and indicators:* (a) better national information management systems to ensure access to existing knowledge; (b) adequate preservation facilities at the National Archives; (c) policy and adequate information management systems for transition from paper based records environment to electronic records and electronic archiving in place; and (d) qualified staff to ensure that government records are adequately managed.

INFORMATION COMMUNICATION TECHNOLOGY (ICT) IN EDUCATION [N$344.7 million]

Background

1. The Namibian Government has clearly and positively identified in *Vision 2030* that ICT skills and competencies are regarded as core elements of living and participating in the 21st century and in the development of a dynamic KBE. The knowledge society is now more about skills, social networks and leading people to greater economic participation. Education has a key role to play in providing these skills and competencies.

2. As we move towards a knowledge-based development paradigm, as stipulated in Namibia's Vision 2030 *"Integrating ICT education and training into education and training system"*, issues of access to the local and global pool of knowledge and information become paramount.

3. Namibia recognises the importance of Information and Communications Technology (ICTs) as a tool in the development of the country. ICT has a role to play in education both directly as a subject and indirectly as a tool to assist in educational delivery and management. As such, ETSIP has rightly designed ICTs in education as a cross-cutting theme which will demand capacity building and expertise at all levels.

4. Notwithstanding the relative success of the education sector, the new century brings a fresh set of challenges and demands for which educational institutions, in their present form, are not prepared. Even the best of these educational institutions have served a different set of demands for a different age. These challenges in the context of the Information Age have put educational institutions across the world under tremendous pressure to provide every educational institution (if not every learner) with information and communication technologies (ICT), including computers and their accessories and connectivity to the internet. At the very least, educational institutions are expected to establish and utilise fully equipped media centres containing more than just printed materials and are required to provide access to global information by electronic means. The pressures are coming from stakeholders, educational partners, vendors, parents, businesses, and technology advocates. Namibia is no exception.

5. ETSIP aims to embed ICT at all levels of the education system and to integrate the use of ICT as a tool in the delivery of curriculum and learning, thereby leading to a marked improvement in the quality of the learning and teaching process across all levels. ICT skills and specialisations are required if Namibia is to make the transition to a KBE and the ICT skilled workforce it demands.

6. The initial focus will be on building a firm foundation in general education in order to provide these skills and competencies, from which other sub-sectors such as Vocational Education and Training, Tertiary Education and Training and Information and Adult and Lifelong Learning can benefit. Developing ICT as a cross-cutting theme will support the creation and distribution of knowledge to communities in a more equitable manner. In doing so, ICT will act as a tool in driving the development of knowledge and innovation, strengthening the quality and relevance of Tertiary Education and Training and providing access to information in a more integrated and comprehensive manner across the sector.

7. The role of ICT in the battle against the HIV and AIDS pandemic is an invaluable tool to enhance disease monitoring, drug distribution systems (for generic ARV's), training of caregivers, patient education and monitoring and facilitation of the development of support networks for people living with HIV and AIDS and their caregivers. Comprehensive ICT strategies are required where ICT as a cross cutting tool can add real value to prevention, treatment, awareness raising and enhance access to knowledge on treatments.

8. International experience shows that integrating technology effectively into learning systems is extremely complicated. It involves a thorough analysis of educational objectives and changes, a realistic understanding of the potential of technologies, considering the pre- and co-requisites of successfully implementing ICT for education and the prospects of this process within the dynamics of educational change and reform.

9. It is the view of the MoE that ETSIP does not only serve to complement government initiatives to entrench the integration of ICTs in the culture of primary, secondary and tertiary education, but it outlines the issue of ICTs for Education in the context of the educational sector's struggle to be relevant, responsive and effective in meeting the challenges of the 21st century as well as those identified in Vision 2030.

Achievements

10. International case studies on ICT integration indicate the necessity of a coherent national policy on ICT in education as a catalyst for successful ICT integration and training**.** As long ago as 1995, Namibia was fully aware of the importance of ICT when the first ICT Policy for Basic Education was adopted by the government through the National Institute for Educational Development (NIED). To keep up with the rapid changing nature of ICT and education, this policy was revised in 2000. In 2003, an ICT Steering Committee for Education was constituted to provide a current and comprehensive document. This process culminated in a new ICT Policy for the Education Sector in 2004 which was approved by Cabinet during March 2005 and launched in June 2005. This policy is informed by already existing national frameworks and blueprints which recognise the unlimited possibilities that ICTs hold in promoting sustainable national development and are therefore in line with Vision 2030, the Public Service Informative Technology Policy, the National ICT Policy, the second National Development Plan (NDP 2), the Strategic Plan for the Ministry of Basic Education (2001-2006) and Information for Self-Reliance and Development – a policy framework for libraries and allied information agencies in Namibia. The educational goals outlined in the policy put more emphasis on the pedagogical use of ICT as an integrated tool in the teaching-learning process at all levels in the educational system.

11. An ICT for Education Steering Committee, comprising of representatives from diverse sectors of the economy, including the MoE and other line Ministries/Offices, civil society, agencies/donor/development partners, pre-tertiary and tertiary educational institutions and volunteer organisations, was formed. The central function of the committee is to provide the overall vision, coordination and management of the policy as well as all ICT projects and activities supporting education in Namibia. To ensure functionality and effectiveness of this crucial body, different working groups were established to provide specific guidance to ICT related projects and activities. These include development of curricula, content, training and usage, technical support, ICT for educational management and monitoring and evaluation.

12. Over the past year, members of the ICT Steering Committee developed a detailed draft implementation schedule. This implementation schedule articulates the timelines and actions of how and when certain activities are to be conducted in pursuit of the overall national targets agreed by the stakeholders on the ICT for Education Steering Committee.

13. A detailed set of targets have been developed for each component of the ICT in Education sub-programme and the Implementation Schedule. These include a phased approach to the deployment of ICTs to educational institutions throughout the country, the timing of the development of curriculum and content, the numbers and timing of training provided to teachers and learners in ICT skills and the development of a sustainable Education Support Centre to provide maintenance and technical support. (Summary targets are included in the outputs and indicators section of each component below, but please refer to the Strategic Implementation Plan Targets document for a more comprehensive list.)

14. A division of Information Technology has been established within the MoE (Head Office) and most Ministry staff have access to internet and e-mail through the government's intranet. The Education Management and Information System (EMIS) and National Examination and Assessment System (NEAS) are in place and operational and use large databases.

15. It is noteworthy to mention that drastic improvements in telecommunications infrastructure connecting the rural communities to the main capital have been attained since independence. For instance, the number of fixed lines has increased, the mobile network covers most of the populace, internet services can be assessed countrywide and over 600 leased lines are in operation. The 2003/4 Household Income and Expenditure Survey found that 33.5% of Namibians own a telephone or cell phone while a further 33.3% have access to one. With funding, this makes it easier to provide ICT equipment such as computers and connectivity in schools and other educational institutions countrywide.

16. The PoN, the colleges of education, NAMCOL and UNAM have expanded their ICT facilities. UNAM has an information, learning and resource centre with videoconferencing facilities. The Namibian Open Learning Network (NOLNet), serving over forty open learning centres, supports the distance learning activities of UNAM, the PoN and NAMCOL.

17. NIED has developed a website with very useful resources for teachers. The subject Integrated Media Technology Education (IMTE), which includes some ICT literacy, is offered to trainee teachers. Technology related elective subjects currently offered at school level include Keyboarding and Word Processing and Computer Studies at junior and senior secondary schools. At primary school level the non-promotional subject, Basic Information Science includes a minor component on ICT literacy. Other initiatives include those of the PoN and UNAM which offer courses online.

18. SchoolNet Namibia was started in 1999/2000 as non-profit ICT service provider with the assignment to introduce affordable computer technology and internet access to all school in Namibia. It strives to be a leading, internationally-acclaimed and innovative not-for-profit ICT service provider to the education sector, committed to fulfilling the educational, social and environmental responsibilities in Namibia through the promotion of free and open source technology solutions which offers an indigenous infrastructural solution to schools including the provision of affordable 24/7 internet access toward Namibia's educational advancement.

19. The Community Education Computer Society Namibia (CECS) is a registered IT Academy. It is also a non-profit organisation which aims to become self sustainable by offering good quality computer literacy education within the community at a competitive price. The primary motivation of CECS Namibia is to teach teachers and communities to become computer literate. Currently focused on Basic Computer Literacy skills, CECS plans to offer more advanced computer courses as both teachers and communities become more and more computer literate.

20. During June 2005 the National Computer Refurbishment Centre was inaugurated. This day marked the completion of a two-year collaboration between the Namibian Parliament, MoE and Microsoft to create a new approach to provide Namibian schools and communities with access to technology and computer-related training. The joint initiative, named the African Pathfinder, comprises a broad range of programmes which, together, enable information and communication technology (ICT) to be procured and put to use for African society. As part of the evaluation process, the African Pathfinder initiative equipped 13 pilot schools in Namibia with a comprehensive learning solution, incorporating technology infrastructure, telecommunications, teacher-training programmes and innovative software solutions.

21. In 2005, the Global eSchools and Communities Initiative (GeSCI) established a presence in Namibia in recognition of the vital role that new information and communications technologies (ICTs) can play in creating long-term, sustainable development. GeSCI has been instrumental in facilitating a major group of stakeholders in Namibia during 2004/2005 to come together and

create a national e-schools strategy and implementation plan for the MoE. The objective was to create and implement a comprehensive, demand-driven, efficient and coordinated 'end-to-end' e-schools strategy and implementation plan. Such a plan will address the development of curricula, deployment of the ICT solution, creation of relevant and local content, user training and support, technical support and maintenance, as well as monitoring and evaluation. Making the ICT solution a reality for large numbers of schools in Namibia – at a reasonable cost – will require the implementation of such a system.

22. Whereas significant improvements have been made to provide Namibian schools with ICT infrastructure and teacher support, much remains to be done to support the integration of ICT into Namibia's schools. Utilising ICT in the classroom as an effective learning tool for all learners and assessing progress is another challenge. Tertiary education institutions including the University of Namibia and the colleges of education are to be strengthened to train more teachers at levels of education ICTs to help achieve overall vision and educational objectives of the Namibian ICT Policy. While Namibia is in the upper bracket of e-readiness countries and has policies in place to advance ICTs in the curriculum, more energy and resources are required to expand access and equity to ICTs in schools in rural areas which currently remains a major challenge. There are new possibilities for modern ICTs which incorporate and extend the range of older technologies by which teachers can be supported. Altogether, these ICTs can help motivate and empower educators, assist them with day-to-day situations and provide avenues for lifelong professional development. With careful planning and innovative design, Namibia can realize the new promises presented by ICTs.

Challenges

23. Despite the achievements to date, Namibia still faces many challenges in realising its policy on integrating and using ICT effectively in the education system and in reducing the digital divide among all communities. Curriculum is one such challenge. Currently there is almost nothing in the curriculum for mathematics, science and English at secondary level which addresses the use of ICT as a cross curricular tool. A rigorous review of the curriculum to strengthen opportunities for practical use of ICT is necessary. A developmental framework of ICT skills and competencies at all levels is required as educators are unclear as to what skills and competencies are relevant to develop. In addition, the provision of relevant digital content, for both teachers and students, to support and realise the potential of the revised curriculum is essential.

24. In parallel, the training of teachers in using ICT is crucial as they are the key activators in this process. The colleges of education need to strengthen their capacity to incorporate the curriculum developments and ensure that these teachers will have the knowledge and skills required to deliver the curriculum. In addition, the delivery of in-service training needs to find a way of addressing ICTs. A further challenge lies in the need to motivate principals and heads of departments to use ICTs and see their value in teaching and learning. ICT needs to be guided by strong leadership.

25. Underpinning the developments in curriculum and training models there is an absolute need to have access to the hardware, software, technical support and other infrastructure. At present access is patchy, in some cases unreliable and expensive Bandwidth access is also prohibitive.

26. A further challenge exists for educational management to improve on the existing EMIS in serving all educational partners and in capturing major indicators for the sector at large. The decentralisation of EMIS would assist in moving this forward. In addition, the on-line availability of information on learner examination results from the DNEA needs to be more accessible at regional level.

Priorities

27. Since the adoption of the *ICT Policy for Education*, the priority areas have evolved slightly and been amended to reflect to changing needs of the education sector. The revised priority areas, as amended and approved by the ICT and Education Steering Committee, and endorsed by the Ministry of Education and all stakeholders, are:
    (a) Pre-service and In-service teacher education at Colleges of Education, tertiary institutions, and other related institutions;
    (b) Schools with secondary grades (combined schools, junior secondary schools, and senior secondary schools);
    (c) Vocational training at Vocational Training Centres and COSDECs;
    (d) National, Regional, and Community Libraries and Community and Adult Education; and
    (e) Primary Schools.

    Learners with special needs are integrated within all priority areas.

28. The *ICT Policy for Education* attempts to deal with the difficulty of addressing the twin goals of equity and excellence and prioritises schools and institutions according to how close their learners and students are to entering the workforce. For example, learners in pre-service teaching establishments are about to enter the workforce and will be passing on their skills to others. This makes them a higher priority than learners in primary schools that have many years ahead with further opportunities to develop their ICT skills.

29. Within this overall structure, the priority will be to develop ICT based on a number of factors. A model is being developed that will guide the MoE and its partners in selecting priority sites for ICT investment. Factors such as Cluster Centre Status, partnerships with distance learning organisations, learner:teacher ratios, power and telecommunication availability and teacher skills profiles are some of the criteria which will be used. The operation of the model will be transparent (published) and open to public scrutiny and review.

30. In order to empower teachers, priority will initially be given to providing access for teachers before installing systems for learners and students. This will give teachers an opportunity to develop e-confidence and to use the tools to support teaching thus producing sufficient numbers of qualified teachers to meet these challenges.

31. Priorities will show no regional bias and will be based on the proportion of students per region i.e. if a region has 10% of the students then it gets roughly 10% of the resources.

32. In the end-to-end process, priority will be given for the revision of curriculum for secondary grades in science, mathematics, English and ICT. This will require careful planning to ensure that practical and relevant use of ICT is incorporated. Secondly, priority is to develop and implement training programmes for colleges of education and teachers attending in-service training to develop their skills and competencies. In parallel, the third priority will be to plan for the provision of access to the infrastructure and technical support required to implement developments in curriculum and training in colleges of education, secondary schools and comprehensive schools. The fourth and final priority is to continue to build on the effective use of ICT in education management with a view to improving efficiency and dissemination of information at regional level.

Priority Components

Component 1: Review and develop curriculum and content
Component 2: Review, develop and implement training
Component 3: Develop and deploy ICT services and support
Component 4: Strengthen education management through the use of ICT
Component 5: Monitoring and evaluation

Component 1: Review and develop curriculum and content [N$6.2 million]

33. *Challenges:* At present there is a lack of practical guidance on *how* to use ICT to support curriculum delivery and improve learning outcomes. In addition, implementation of curriculum changes is ineffective if there are insufficient relevant resources and content available.

34. *Objectives:* Curricula are developed for (a) ICT as a tool across the curriculum; (b) ICT Literacy; (c) ICT as a subject; and (d) an e-learning centre is established to develop and distribute relevant content.

35. *Component Description:* The main activities required to achieve the objective of this component are as follows: (a) the development of a methodology to integrate ICTs as a cross curricula tool by identifying themes within the subject areas (mathematics, science and English) where ICT can add value to the learning outcomes. Group work, project based learning and problem solving should be addressed in the themes selected. The aim is to provide standard solutions for ICT integration in all schools, e.g. standard software for science selected using a transparent evaluation instrument which will be developed. Teacher guidelines and support materials will be developed. (b) a competency framework for ICT literacy skills will be developed to incorporate skills at three levels (Foundation, Intermediate and Advanced) based on cross curricula themes. Clear attainable outcomes will be aligned with international standards. Certification, *Namibian ICT Literacy Competency (NIC)* will be offered towards the end of grade 10 and grade 12. Approval for the certification will be required from the necessary regulatory and administrative bodies. Relevant support materials will be developed to implement the framework. (c) the syllabus for teaching ICT as an examinable subject, Computer Studies, will be reviewed, revised and implemented for grades 8-10. Grades 11-12 will continue to borrow from Computer Studies from Cambridge International Examinations (CIE) until this subject has been reviewed by NIED. Computer Studies will be offered as a major study option in the BETD as part of the review of teacher education[3]. The subject, Integrated Media Technology Education (IMTE), offered by colleges of education will be revised to strengthen the component on ICT literacy. (d) development of an e-learning centre will begin during the first phase, to support e-learning activities in all educational institutions in Namibia. The purpose of the e-learning centre will be to coordinate the training of e-content developers, provide a common platform and basis for all future e-content training and act as a common digital content library for all e-content developed by stakeholders. This will be achieved by providing access to locally relevant content including resources for training programmes.[4]. An Memorandum of Understanding will be negotiated with InWEnt, a German development partner, to assist in the creation of the e-learning centre with terms to be agreed by all stakeholders. Instruments to evaluate content (online and software) will be designed. Firstly, a review of existing relevant content will be undertaken. Where gaps in content are identified, a strategy and plan for the development of content will be in implemented. Dissemination of best practice models and ideas for adapting ICT in schools will also be presented.

36. *Implementation:* NIED will lead the first activity in collaboration with a number of stakeholders. International experiences in this area will be examined and approved by the National Examination and Assessment Board. In parallel, the revised curriculum will be incorporated in the curriculum

[3] See Component 3 of Tertiary Education and Training
[4] The development of this e-learning centre will serve as a great resource to the wider community

of the colleges of education currently under review. NIED will also lead the second activity in co-operation with a number of stakeholders. While the framework is under development, schools, colleges and others will continue to use the existing guidelines on ICT literacy as a stop gap solution. The third activity, the revision of the Computer Practice syllabus, will be led by NIED in coordination with UNAM .The process of replacing the typing syllabus with that of Keyboarding and Word Processing will continue to be implemented in schools. The layout and presentation of these classes will be reviewed to ensure that the facilities are being used to maximum benefit in the school. The fourth activity will be led by NOLNet and international practice will be examined. Training will be offered to content developers, instructional designers, e-learning managers and virtual learning communities. Prior to universal internet access, the use of CDs as a means of delivery will also be employed. In order to develop a bottom up model and greater ownership, teachers will be invited to partake where possible.

37. *Outputs and indicators: (a)* Revised curriculum with ICT opportunities for science, mathematics and English made available to colleges of education and during in-service training. Based on the priorities established by the Steering Committee, the initial focus shall be secondary school curriculum; (b)Distribution of revised curriculum and incorporation in the development of training modules; (c) Curriculum revised for ICT as a subject in schools and colleges of education*;* (d) ICT offered as a major option in colleges of education; (e) A Namibian ICT Literacy Competency Certification (NIC) developed and implementation initiated; and (f) e-learning centre developed with relevant content reviewed and made available for users.

Component 2. Review, develop and implement training [N$84.8 million]

38. *Challenges*: There is insufficient support and expertise at regional level to implement training. Participation in ICT in-service training is not high. Within the colleges of education, staff and students are still lacking in the skills and knowledge enabling them to use ICT more effectively. Currently there are no effective pre-service training programmes for computer studies and computer practice. The pivotal role of leaders in schools has been inadequately addressed.

39. *Objectives:* Appropriate training models for educators, lecturers and pre-service teachers are developed that enable them to access the necessary skills, competencies and understanding in the use and application of ICTs in learning environments.

40. *Component description:* The underlying principle of all training programmes should be educational and pedagogy, not the technology itself. The ICT steering committee will oversee and coordinate the teacher education activities in co-operation with the teacher education task force established under component 3 of the Tertiary Education and Training sub-programme. Priority will be given to colleges of education and related in-service training programmes. Access to training will be made available for education managers, teacher advisory services and inspectors and to underserved groups where appropriate. The use of the internet will be promoted and encouraged in all training programmes.

41. Firstly, an assessment of needs and skills of teacher educators will be conducted in all colleges of education. Secondly, the provision of initial training programmes for ICT-based subjects will be reviewed. Thirdly, training programmes will be developed with set standards and a coordinated plan will be put in place to deliver and manage the implementation. The existing IMTE course will be revised and Computer Studies will be introduced as a major specialisation. Fourthly, an assessment instrument will be developed to establish the skills and competencies among the students in colleges and UNAM in order to determine the appropriate entry level for training and the development of standards. Certification will be explored by the relevant stakeholders. Online training models will continue to be enhanced and explored.

42. An audit of existing ICT availability, working condition of equipment and knowledge among teachers in all schools will be conducted. Based on the audit, a strategy will be developed for the delivery of training. Training opportunities will be provided at cluster centres for the use of ICT

as a cross curricular tool and in basic troubleshooting. Engagements with local training partners such as CECS Namibia have begun to provide the first level of training to advisory teachers and others.

43. The role of the teacher advisory service in supporting ICTs in schools at regional and cluster level will be enhanced. Teachers with abilities in ICT will be invited to support the in-service training programmes. Access to ICT facilities in public libraries and multi-purpose youth centres will provide opportunities for teachers to encourage their learners to use the ICT facilities for project work.

44. The influence of education managers, teacher advisory services and inspectors on the uptake of ICT at school level cannot be underestimated. The needs of these groups will be reviewed and a programme developed to improve their skills base and ability to plan for ICT usage.

45. The needs of underserved groups cannot be ignored. A mapping exercise will be conducted to ascertain the facilities available for training. An implementation plan serving the needs of these groups will be developed and operationalised.

46. *Implementation:* NIED in collaboration with colleges of education, PQA and the regional supports will be responsible for guiding and implementing these activities. International expertise will be examined in the development of the training programmes. The implementation of training for underserved groups will be implemented under the direction of the ICT Steering Committee.

47. *Outputs and indicators:* (a) Needs analysis conducted for the respective groups; (b) training programmes revised and developed according to needs*;* (c) implementation of training programmes initiated (actual training of teachers and learners will be based on the schedule upon which ICTs are deployed). Training is intended to occur simultaneously with deployment. Assuming the targets agreed by the ICT Steering Committee on deployment are achieved, the targets for ICT literacy skills training are: all teacher educators in the colleges of education by 2008, approximately 6,500 teachers by 2008 and 10,000 teachers by 2010; and (d) regional ICT training support structures identified and measures taken to strengthen them.

Component 3. Develop and deploy ICT services and support [N$225.4 million]

48. *Challenges:* No plan currently exists to implement the procurement of infrastructure and technical support, neither do facilities at regional level to implement and support training.

49. *Objectives:* An effective ICT services strategy is in place to acquire, deploy and support the technology infrastructure in educational institutions.

50. *Component description:* An ICT services and support structure will be developed which can provide the necessary technology and support to facilitate the implementation of revised curricula and training and to ensure that these are synchronised. This must be sustainable to ensure that learners and students have access to the technology which will enable them develop the relevant skills and competencies at all levels of the education system but in particular in colleges of education and in secondary grades.

51. *Implementation:* The ICT Steering Committee will coordinate the activities which involve (a) acquisition of hardware, software and internet access; (b) deployment of infrastructure; and (c) technical support (including training) and maintenance.

52. There are a number of measures to be taken in this respect and a critical path to follow. A task force (including representatives from industry) will be set up and terms of reference developed to devise an optimal technology standards and specifications plan for hardware and software. In doing so due consideration will be given to benchmarks in other countries and data collected on

existing operations in Namibia. The task force will ensure the standards selected allow for reasonable inter-operability (open standards), diversity, vendor independence, functionality and value for the education community. Refurbishment centre costs will be reviewed regularly to ensure that they are economically viable. The standards will address issues of security including that of internet safety. The plan will be approved by the ICT Steering Committee and a TCO (total cost of ownership) model developed. A procurement process will then be developed for hardware and software based on the TCO model.

53. Priority levels for deployment of services have been developed but an audit is necessary to determine what is already available before any deployments occur. This will take the shape of a national audit to determine the existing level and type of access, service providers and technical support and will assist in determining levels of readiness among schools and institutions of learning thereby enabling the delivery of pre-service and in-service training. This audit will also identify institutions and schools which do not meet the readiness criteria and a plan will be put in place to establish readiness for deployment.

54. As mentioned earlier, the priority levels and the national audit will result in a clear and transparent deployment schedule that is phased by education institution type as well as e-readiness criteria within each institution type.

55. Technical support will be provided through the following mechanisms: (a) a task force to determine the level and type of technical assistance required and how best to deliver it; (b) a National Educational Help Desk (c) technical manuals and guidelines. (d) a plan for training to build human capacity at local level and strengthen first line support, troubleshooting and maintenance focusing on colleges of education, cluster centres and teacher resource centres at regional level; (e) the development of an internship scheme for youth and volunteers to provide support and maintenance;[5] (f) the creation of regional posts for computer technicians; and (g) a policy for e-waste disposal and recycling.

56. Outputs and indicators: (a) Procurement process put in place based on agreed specifications of hardware and software; (b) carefully planned, phased deployment schedule, based on priorities and e-readiness criteria, developed; (c) plan developed to establish readiness of schools and colleges of education for continued deployment; (d) deployment initiated for colleges of education and secondary grades who meet the readiness criteria (Assuming the targets agreed by the ICT Steering Committee on assisting educational institutions on meeting e-readiness criteria are achieved, the targets on deployment are to deploy 1-3 computer labs in each college of education per year and equip 150-250 secondary and primary schools with ICTs per year)*;* (d) a National Educational Help Desk established to provide technical support in late 2006*;* (e*)* provision of technical support and training at regional levels; and (f) policy for e-waste and recycling developed

Component 4. Strengthen education management through the use of ICT [N$26.3 million]

57. *Challenges:* The existing ICT systems in use do not meet the needs of users at regional level.

58. *Objectives:* Education managers are able to use ICT to enhance their work. Management systems improved at all levels. Enhanced collection of and access to educational information throughout the system.

59. *Component description:* This component is designed to improve the efficiency of educational administration and management, through a variety of means such as increased use of electronic means of communication; Integrated Financial Management Systems (IFMS); enhanced EMIS to facilitate the capturing of data at regional level and throughout the sector and the implementation of a web based system for the more efficient registration of learners for examinations at regional

[5] Vocational Education and Training

level by the DNEA. In parallel, the scoping and implementation of a web based portal will continue with a view to regional deployment where the technology and expertise is available. The availability of these data will provide school managers; inspectors, etc. with critical information on learner performance and allow them to develop more strategic plans for improvement.

60. *Implementation:* This component will be implemented by PAD (EMIS) and the IT division.

61. *Outputs and indicators:* (a) Enhanced EMIS reaching regional level and all elements of the sector*;* (b) implementation of a web based system by DNEA for registration of learners at regional level for national examinations; (c) national and regional telecommunication links for all regions and educational institutions enabling the provision and improved use of email and internet; and (d) IFMS in place.

Component 5: Monitoring and Evaluation (M&E) [N$2.1 million]

62. *Challenges:* Currently no monitoring and evaluation system exists to track development and progress and support the ICT in education initiative.

63. *Objectives:* Clear and detailed monitoring and evaluation mechanisms and frameworks are in place.

64. *Component description:* Under this component, the framework of a national M&E structure will be established to oversee implementation of the ICT in Education Implementation Plan in line with global trends. M&E support will be provided to the curriculum development process and performance will be measured against stated targets.

65. *Implementation:* The ICT Steering Committee will be responsible for monitoring and evaluation.

66. *Outputs and indicators:* Monitoring and evaluation mechanisms and frameworks are in place and functioning.

HIV and AIDS [N$ 45.6 million]

Background

1. The HIV scourge has long been identified as a major economic as well as a social and personal threat. There is now strong evidence both from within and outside the country that effective education programmes that address both prevention and support issues can mitigate the impact of the virus. The MoE has, with much welcome assistance from DPs and NGOs and in close co-operation with the Ministry of Health, come far in developing an effective programme and is now into the implementation phase.

Achievements

2. HIV and AIDS issues have been a significant element within education programmes since independence. In what might be considered the first phase, these were characterised by numerous pilot initiatives across the sector, often developed on the initiative of small enterprising NGOs, which gave valuable information on the characteristics of effective interventions. One or these, a peer education initiative aimed at mid-teenagers, *My Future is my Choice*, pioneered with help from UNICEF, has been widely copied elsewhere.

3. The second identifiable phase of HIV and AIDS education was characterised by the development of structures for coordinating the response, bringing together the experiences of the pilot phase. A sector wide coordinating committee was established, a series of linked national programmes developed and successful funding application for these was made to the Global Fund. An office with a secretariat was established in the ministry of Education, the HIV and AIDS Management Unit (HAMU) and regional units, Regional AIDS Committees for Education (RACE) were established matching a similar structure in the health sector. A successful request was made to the European Union to fund technical assistance for management support.

4. The third phase, a fully coordinated and managed response to HIV and AIDS followed the publication of the *National Policy on HIV and AIDS for the Education Sector*. The work plan of HAMU, and those of RACE are based on these binding objectives, which also reflect the objectives of the Third Medium Term plan, MTP III, 2004 -2009, the overarching government plan covering all sectors. These objectives form the basis of this programme. The main components are:

   Component 1: Awareness raising and empowerment
   Component 2: Mainstreaming HIV and AIDS
   Component 3: Strengthening Regulatory Frameworks
   Component 4: Meeting the needs OVC
   Component 5: Managing the HIV/AIDS response

5. These components each bring together numerous activities. They range from two large nationwide training programmes, one in prevention and the second in support, to small but no less important, initiatives in the Arts, in advocacy and in developing codes of conduct. They cover the whole sector and all age groups.

6. A sector-wide HIV and AIDS management unit (HAMU) evolved from a management committee established in 2000. It has this year reached the strength needed at Head Office to manage its work of coordinating the activities of numerous stakeholders both within and outside the service. A full-time external technical advisor has been appointed. An operational plan for HAMU has been drawn up following the formal adoption of the HIV and AIDS and Education policy and its relationship with the overall government structures is clearly defined. This programme operationalises the management plan.

7. According to MTP3 for HIV and AIDS the education sector has set up a sectoral steering committee on HIV and AIDS. Members of the steering committee are from the Ministry of Education, relevant development partners, NGOs and FBOs. It is chaired by the deputy Permanent secretary. Keeping in mind that the education sector is the largest sector and the biggest employer this steering committee consists of 35 members. These members are focusing in working groups on 4 different key areas according to MTP III, (a) enabling environment, (b) prevention, (c) care and impact mitigation, and (d) management response. The working groups are headed by a group leader, who form, together with the Deputy Permanent Secretary, the Executive Committee. HAMU provides the secretariat for both the Sectoral Steering Committee and the Executive Committee. The working groups meet monthly, the Executive Committee quarterly and the Sectoral Steering Committee twice a year.

Priorities

Sector objective: To reduce the transmission of HIV, mitigating the social and economic impact of AIDS on the Namibian education system at all levels

8. The five components mentioned above are all essential elements of the programme. Within each component, prioritising is driven by a natural sequence of events within each activity (training of trainers must precede major training programmes, etc.) and also by personnel availability issues. The programme has been carefully sequenced to accommodate these.

Component Descriptions

Component 1. Awareness raising and empowerment [N$13 million]

9. *Challenges*: The key issue is to make the communities permanently aware of the importance of prevention and impact mitigation. Further on in awareness raising campaigns new developments have to be communicated like workplace programmes and policies and other regulatory framework documents. In the Namibian context the regulatory framework is already in place – only minor amendments can be expected. However, it will be a main challenge to ensure the implementation of these policies, guidelines and other regulatory framework documents. This can only be achieved by focusing on empowerment of the target groups like OVC, students, teachers, learners, educators and other sector employees.

10. *Objectives*: The objectives of this component are to sensitise and empower the employees, learners and students of the education and training sector to make informed decisions by providing information and knowledge on HIV/AIDS and other related/underlying issues.

11. *Component Description*: Activities will include national events and campaigns, including the media. Comprehensive IEC materials on HIV and AIDS, sexual violence, abuse and its underlying causes (e.g. gender and alcohol), stigma and discrimination, OVCs and other health issues, and support services available (e.g. PSEMAS,VCT, Counseling) will be developed and distributed. Awareness raising will be done on the Code of Conduct. Information on regulatory frameworks will be communicated to communities and duty bearers. Activities comprise in detail: (a) Conduct awareness raising campaigns and events; (b) Ensure that all directorates of the MoE spread the message on HIV and AIDS*;* (c) Provide relevant HIV and AIDS information; (d) Capacity development programmes to include HIV and AIDS issues for teachers and educators (e) Capacity enhancement programmes to address identified gaps*;* (f) Gender equity; (g) Expansion of teacher education regarding knowledge about HIV and AIDS (h) Addressing to the needs of higher learning institutions; and (i) Orientation of education managers on Life Skills and HIV and AIDS programmes.

12. *Implementation*: HAMU will coordinate and manage all of these activities. The implementation will partly be done by HAMU. However, the main implementer will be the Regional AIDS

Committees on Education, RACE, who oversee the activities in the 13 regions. The implementation will partially be done in close cooperation with other line Ministries, like the Ministry of Gender Equality and Child Welfare, and Development Partners, in particular UNICEF.

13. *Outputs and Indicators*: (a) Different types of relevant and appropriate IEC materials are procured, developed, printed, distributed and broadcasted; and (b) National events and media campaigns are held annually. The indicators will be the number of national events conducted annually and the number of educational institutions organising activities during national events.

Component 2. Mainstreaming HIV and AIDS [N$12.7 million]

14. *Challenges*: Mainstreaming is a key issue in the fight against HIV and AIDS. Preventive measures are necessary to enhance the system's responsiveness against the pandemic. These have different dimensions: (a) ensure that HIV and AIDS are reflected in the different curricula, (b) making the relevant materials available, and (c) a comprehensive workplace programme on national and regional level to meet the demands and needs of the sector's employees.

15. Objectives: The objectives include: (a) ensuring that curricular and co-curricular life-skills, sexual health and HIV and AIDS education prevention programmes are in place in all educational institutes for all learners and students; (b) Making teaching and learning materials on HIV and AIDS available; (c) establishing and implementing the workplace programme; and (d) training teachers and educators on skills-based HIV and AIDS education.

16. *Component Description*: Under this component, care will be taken that curricular and co-curricular life-skills are in place at all educational institutions. Skills-based HIV and AIDS will be strengthened through curriculum revision and the teaching of HIV and AIDS components in the curriculum will be strengthened through the training of teachers and educators as well as the development of teaching and learning materials. This will include strengthening skills-based HIV and AIDS education in the curriculum for pre-service teacher education. The implementation of co-curricular activities (e.g. Window of Hope, My Future is My Choice and AIDS Awareness Clubs) will be enhanced by teacher training and improved monitoring and reporting. The HIV and AIDS workplace programme will be established and implemented through the training of sector employees, counseling, in-house referral, etc. Teacher absenteeism and attrition will be managed through the establishment of a relief teacher system, including the definition of minimum training standards, establishing a pool and database of substitute teachers and having in place a monitoring system for tracking absenteeism and attrition. Advocacy will be done for automatic or compulsory membership of employees of the education sector to PSEMAS as well as for the protection of rights of sector employees.

17. The activities necessary are in particular (a) Define teacher competencies related to HIV and AIDS at all levels of the system, including universal precaution measures regarding HIV and AIDS; (b) Liaise with NIED to strengthen HIV and AIDS response in the curriculum*;* (c) Provide first aid kits for all institutions*;*(d) Provide penis and pelvic models to demonstrate condoms and femidoms use; (e) Mainstream HIV and AIDS into the curriculum; (f) Revise curriculum to include issues of HIV prevention*;* (g) Handing over of established programmes from Development Partners to governmental structures (e.g. *Window of Hope* and *My Future is My Choice*)*;* (h) Intensification of teacher training to deliver HIV and AIDS prevention programmes; (i) Developing guidelines on integration of HIV and AIDS and Life Skills into the curriculum; (j) Ensuring curriculum panels integrate HIV and AIDS and life skills at all levels in the curriculum; *(*k*)* Development of learner support material including HIV and AIDS; (l) Institutionalising of extracurricular programmes on HIV and AIDS*;* (m) Identification and training of contact teachers; and (n) Assessment and approval of new programmes.

18. *Implementation*: HAMU will coordinate and manage all of these activities. The implementation will partly be done by HAMU. However, the main implementer will be the Regional AIDS

Committees on Education, RACE, who oversee the activities in the 13 regions. The curriculum development will be done in close cooperation with NIED, the National Institute for Education Development. The strategy planning and implementation of the workplace programme will be in close cooperation with NABCoHA, the Namibian AIDS Business Coalition against HIV and AIDS.

19. Management actions on the workplace programme (a) will start with a detailed needs analysis of workplace issues and a costed workplace programme strategy, which will allow some prioritisation and more accurate planning and costing of the interventions. (b) Strategies for increasing membership of Public Sector Employees Medical Aid Scheme (PSEMAS) will be pursued including opening it to all employees and pursuing the issue of compulsory membership with the Office of the Prime Minister. (c) Workplace strategies will be developed in co-operation with private sector initiatives, i.e. Namibia Business Coalition on AIDS (NABCOA). (d) The provision of anti-retroviral (ARV) therapy will be expanded to all employees. (e) Activities related to workplace issues will be monitored. (f) The need for a relief teacher system will be assessed and guidelines and regulations introduced as required. (g) Workplace support will include the establishment of workplace support groups, the operationalising of an in-house counseling and referral system, the provision of and training on first aid kits for all educational institutions and the provision of condoms. (h) Advocacy for workplace support will include media coverage, the development and distribution of IEC materials, advocacy for the rights of people living with HIV and AIDS (PLWHA) within the education sector, the development of a tertiary education and training policy related to issues on HIV and AIDS, and the familiarisation of education managers with relevant policies, guidelines and legal frameworks.

20. The implementation of the programme has already started but the role of key partners in the work, such as General Service and Human Development is not yet fully defined and agreed. Desktop studies have been done and relevant private sector partners identified. The needs analysis and a costed work plan will be done soon and will allow the process to be planned and costed in more in depth and detail. Many of the major costs of the programme (such as the costs of condoms and medication) will be met from designated sources and the Global Fund activities under Round 5 that deal with workplace programmes, though targeting mainly the private sector.

21. *Output and Indicators:* Learners and students have received skills-based HIV and AIDS education. Education sector employees benefit from the workplace program. Indicators will include (a) the number of sector employees who benefit from the workplace programme; (b) the number of teachers trained to implement curricular and extra-curricular skills-based HIV and AIDS education; (c) the increase in the percentage of education sector employees who are members of PSEMAS; and (d) the number of institutions implementing workplace programmes.

Component 3. Strengthening Regulatory Frameworks [N$0.3 million]

22. *Challenges:* School, hostels and workplaces are the very often the place of sexual harassment, a crucial factor for the spread of HIV and AIDS. The fight against it has to be supported by strong policies and other regulatory frameworks. Further on the policies have to guide the support of OVC, which includes the definition of OVC, and protecting them against stigmatisation.

23. Regulatory frameworks will secure (a) safe institutions for learners, students and education sector employees and age, gender, culture, language, special needs and context appropriate education and training and information on HIV and AIDS available to all within the education sector in order to prevent new infections and (b) that OVC will be retained in the educational system.

24. *Objectives:* Safe school, hostel and other educational environments for learners/students, educators, and other sector employees.

25. *Component Description*: This component will review and implement regulatory frameworks for adequate protection of employees, learners, and students, e.g. code of conduct and hostel guidelines. A national code of conduct for learners and students will be developed and implemented. The component will also include the review and implementation of sector-specific HIV and AIDS related policies, including the HIV and AIDS policy, OVC sector policy and revised guidelines for the School Feeding Programme. Furthermore, a monitoring framework for policy implementation will be developed. Lastly, education sector employees, learners and students will be trained on relevant regulations.

26. The activities include in particular (a) Review code of conduct for teachers and educators regarding sexual relationships between teachers and learners; (b) Revise guidelines for hostels; (c) Review public service staff rules*;* and (d) Develop national guidelines for learner/student code of conduct.

27. *Implementation*: HAMU will coordinate and manage all of these activities. The implementation will partly be done by HAMU. However, the main implementer will be the Regional AIDS Committees on Education, RACE, who oversee the activities in the 13 regions. The implementation will partially be done in close cooperation with other line Ministries, like the Ministry of Gender Equality and Child Welfare, and Development Partners, in particular UNICEF.

28. *Output and Indicators:* Relevant policies are reviewed, revised and implemented and a monitoring framework is developed. Indicators will be the number of policies and guidelines reviewed and the number of people trained on relevant policies and guidelines.

Component 4. Meeting the needs of OVC [N$2.3 million]

29. *Challenges:* The number of OVC has increased tremendously during the last years and it will increase even more within the next years to come. OVC are often excluded from the education system because of lack of money. A high number of OVC are the main bread winners of the family, because their parents are suffering from AIDS or have already died. Stigma and lack of education marginalises them from society. The challenge is to retain them in the education system to break the vicious cycle that social produces outsiders. The needs of OVC are mainly food shortage, lack of psychosocial support and stigma. These issues have to be addressed.

30. The MoE is one of many organisations working under the overall purview of the Ministry of Health to mitigate the social and economic impact of HIV and AIDS. It has a defined duty to ensure that all children receive the necessary support so that they can benefit from education and training. This support must address all issues that conspire to keep children infected or/and affected by HIV and AIDS out of the classroom. This component of the programme addresses these issues, which range from advocacy, through feeding and related support programmes to counseling services.

31. *Objectives:* The two main objectives of the component are to: (a) ensure that all OVCs of school-going age attend school and are not deterred from participation in formal education through school development fund or other material contributions requested by schools; and (b) providing a feeding programme for OVCs identified through the school counseling programme around school clusters.

32. *Component Description*: This component will concentrate on meeting the needs of orphans and other vulnerable children. The first step will be to develop mechanisms for identification of OVC through EMIS. The Education Development Fund will be activated and used as stipulated in the Education Act. The revised guidelines for the school feeding programme will be implemented. Lastly, the provision of counseling at schools and other education institutions will be strengthened and circles of support will be established in all regions.

33. *Implementation*: HAMU will coordinate and manage all of these activities. The implementation will include in particular the Directorate of Education, Planning and Implementation, EPI, in particular the divisions dealing with psychosocial support (DATS) and school feeding, and the Directorate for Planning and Development, PAD, in particular the divisions dealing with EMIS. The Regional School Counselors implement the training for teachers on counseling. They report to the Regional AIDS Committees on Education, RACE, who oversee the activities in the 13 regions. The implementation is supported by Global Fund that operates within the framework of HAMU.

34. *Outputs and Indicators:* Outputs will include: (a) EMIS includes information on OVCs; (b) schools access the EDF for reimbursement for OVC; the revised guidelines for the school feeding programme are implemented; (c) counseling support groups at schools are functional; and (d) the circles of support model is implemented. Indicators for these activities will be (a) the availability of information on OVCs in formal education captured through EMIS; (b) the number of learners exempted and the number of schools reimbursed; (c) the number of learners benefiting from the school feeding programme; and (d) the number of functional counseling support groups and circles of support.

Component 5. Managing the HIV and AIDS response [N$17.2 million]

35. *Challenges*: To manage the response on HIV and AIDS effectively structures have to be in place. This includes structures at national and regional levels with officials having clear roles and responsibilities. Additionally the financial system has to be in place and activities have to be monitored regularly in order to optimise the use of funds available.

36. *Objectives:* This component aims to ensure that management structures, a monitoring system and financial system are in place for HAMU and RACE

37. *Component Description:* The main activities in this component will focus on the definition of the coordinating role of HAMU and the establishment of management structures at regional and local levels – RACE and advisory committees at each education institution. This will involve reviewing national and regional organogrammes and recruiting staff. A comprehensive data base and monitoring system will be developed along with a comprehensive financial system and fundraising strategy. HAMU and RACE staff will be trained on monitoring and managing the HIV and AIDS response.

38. Skilled staff will be recruited as necessary by HAMU to facilitate effective fundraising and to manage funds, such as the Global Fund tranches, effectively. Electronic communication networks linking all centres working on the HIV programme will be established under the direction of HAMU.

39. *Implementation:* The development of improved management and communications structures will be the responsibility of HAMU centrally and RACE regionally. HAMU will develop appropriate monitoring structures in co-operation with all directorates across the sector and will manage the required capacity development. The Sectoral Steering Committee with its working groups as "think tanks" and the Executive Committee will support and oversee the coordination of the sector and will ensure that duplication is avoided and the cooperation of all stakeholders is improved.

40. *Outputs and Indicators:* HAMU and RACE structures are adequately staffed as per organogramme. Relevant data is available and funds are properly managed. Indicators of successful implementation of the component are: (a) the number of positions filled per organogramme; the number of quarterly reports submitted; and (c) the number of HAMU and Regional Office staff trained on financial management.

CAPACITY DEVELOPMENT [N$17.2 million]

Background

1. The MoE is the lead agency in the education sector. It requires strong capacity: (a) to lead the sector; (b) to deliver on-going, routine education services to the public; and (c) to implement special, non-routine projects and programmes such as ETSIP. Capacity is strongly related to productivity: high capacity in the MoE will directly increase its productivity, its ability to lead the sector and achieve more with whatever resources it has. Capacity also has a multiplier effect: high capacity attracts additional funding from the government as well as partner agencies because it builds credibility.

Achievements

2. The Institutional Strengthening and Capacity Building Facility (ISCBF), a pooled fund supported by the European Commission and Sida and managed by GRN, was established to support capacity building in the sector. The ISCBF is already funding various assignments to support the development and implementation of ETSIP. Steps have been taken to improve capacity in school management through school principal and school board training. National standards for schools and a corresponding set of instruments were developed and have resulted in the training of regional inspectors. An Integrated Performance Management System (PMS) for the whole of government has been developed by the Office of the Prime Minister. An organisational structure for the MoE was approved in August 2006, combining the former Ministries of Basic Education, Sport and Culture and Higher Education, Vocational Training, Science and Technology.

Challenges

3. The current capacity of the MoE to lead the sector and deliver education services is constrained by several factors: (a) a lack of effective partnerships and an inadequate division of labour among the MoE and existing partners, particularly other ministries and agencies of government; (b) an inadequate organisation structure within the ministry itself; (c) a sub-optimal use of the key tools of leadership by its managers; and (d) a management culture and practice that are not conducive to optimal performance.

4. The division of labour in the sector is unclear in a number of areas and sub-optimal in others. Changes in the roles and functions of education sector ministries, as well as the creation or preparations for the creation of a number of new bodies have resulted in an unclear allocation of roles, functions and responsibilities. They have introduced both real and perceived functional overlaps, resulting, or capable of resulting soon, in role conflict and in the slowing down of action. Insufficient attention is paid by the MoE to the creation and cultivation of partnerships that could potentially contribute to education, both in the public and private sectors.

5. Leaders and top managers in the MoE need to use better the key tools of leadership that provide for action. Conceptual frameworks, as precursors to vision, mission and strategy, are rarely thought through and fully clarified. The tools of vision and mission are used interchangeably and statements of vision and mission, taken together, need to provide much more specific direction. Managers need to improve their skills of strategising. When they formulate strategies to achieve their visions and their missions, managers need to replace long lists of activities that cover all possible actions with shorter lists of priority activities, selected on the basis of technical and administrative feasibility as well as cost.

6. Almost all persons in management positions in the ministry are ex-teachers, or other professionals few of whom have received training in management. Consequently, their management skills require improvement. General management procedures need to be more efficient and work practices could considerably improve. Of particular need for improvement are general practices

such as objective setting, operational planning, supervision, monitoring and follow-up, report writing, coordination and decision-making, staff-development and motivation. The attitudes and behaviours of managers do not yet provide strong enough incentives for performance.

7. The management of specific resources requires improvement. The management of staff, for example, is still based on old notions of personnel management rather than human resources management and development. Morale and motivation are not as high as they need to be and staff satisfaction with their work environment and how they are being managed does not yet get sufficient attention.

8. Currently, there is no integrated, comprehensive asset management policy and the allocation of physical resources is not linked to operation requirements, norms and standards. There are great differences in the provision of these resources between head office and regional offices, as well as between different regions. These resources are not always properly used. Vehicles and office equipment are not serviced and maintained regularly, leading to untimely wear and tear. Vehicles, in particular, are a source of much concern.

9. The management of knowledge and information, which is recognised as an important area by the Ministry, is yet to be fully conceptualised and introduced. Much information is already being collected in the context of EMIS and some of it is already analysed and disseminated; but deeper and fuller analysis can be done and the information can be transformed into knowledge once it is more widely shared both within the Ministry and externally with stakeholders and partners.

10. Partnerships with other organisations are used in a limited way and not yet managed as a strategic activity that can make a significant contribution to the performance of the education system. A considerable volume of technical assistance is received by the Ministry from its partners, but is not managed well. Consequently, some of it is deficient in quality and does not result in knowledge transfer.

11. Efficient implementation of ETSIP will also require an improvement in the procurement capacity of the MoE.

12. Together, these capacity constraints present both an immediate and a longer term challenge to the MoE. Immediately at stake is its ability to implement ETSIP. In the longer term the challenge is to improve management generally and to ensure that the system as a whole operates at higher levels of utilisation, efficiency and effectiveness.

Priorities

13. The government's vision of joining the ranks of high-income countries and its strategy of transforming the country's economy into a knowledge-based economy place a very heavy responsibility on the education system. This responsibility will be met only if the education system has capacity equal to the task. Such capacity does not exist today and cannot be built overnight. The Ministry's strategy is to develop it over the next 15 years as part of ETSIP. However, the implementation of ETSIP in itself requires capacity. Therefore, in prioritising its actions, the Ministry has chosen activities that will be included in the first five-year phase of ETSIP. In this component attention and action will be focused on the 'machinery' that runs the system: the non-teaching part of the Ministry at headquarters and in the regional offices. Teachers, school principals and the management of schools are covered in other sub-programmes.

14. Choosing priority activities does not imply that the Ministry will address only some of the capacity factors indicated above during the first phase of ETSIP leaving other factors for the next phases. Because of its systemic nature, capacity is an integrated product of all of these factors and all must be addressed more or less at the same time. The approach followed by the Ministry is, therefore, to progress on all fronts at the same time, but to do so incrementally. During the first five years of ETSIP, action will include all activities that can and need to be done in each of these

areas. The activities will be prioritised based on technical sequencing considerations to assure that the capacity to build capacity and the capacity to implement ETSIP is in place first.

15. The Institutional Strengthening and Capacity Building Facility (ISCBF) has proved its worth and it will therefore be used to managed the implementation of the sub-programme.

Priority Components

Strategic Objective: Improve the capacity of MoE to manage service delivery, as well as discrete projects and programmes (with particular attention to ETSIP)

Component 1:	Rationalising the division of labour in the sector and restructuring the MoE
Component 2:	Strengthening leadership in the education sector and the MoE
Component 3:	Strengthening general management at all levels in the MoE
Component 4:	Improving the management of human resources
Component 5:	Improving the management of physical resources
Component 6:	Improving the management of information and knowledge
Component 7:	Advocacy
Component 8:	Funds mobilisation, development of partner coordination and management of assistance

Component Descriptions

Component 1: Rationalising the division of labour in the sector and restructuring the MoE [N$0.5 million]

16. *Challenges*: Depending on how it is defined, there are at least 10 different public agencies in the education and training sector, other than the individual schools, vocational training centres and colleges of education run by the MoE. These include four ministries that are directly involved in the sector (the MoE, MGECW and MOF and MWTC) the NPC, the NCHE, UNAM, PON, the NQA and NTA. The respective roles and functions of these agencies are not always clear and there seem to be significant functional overlaps and possibly some gaps among them. The formation of some new bodies, such as the NCHE and NTA, has significant implications for what the Ministry is doing in the areas of tertiary and vocational education and training. Lack of clarity, overlaps and the gaps lead to role conflict between the MoE at the national level and its regional offices, which in the context of decentralisation will report to regional councils, and the link to the Ministry of Regional and Local Government, Housing and Rural Development, is also problematic. Important decisions will have to be made with respect to the extent of devolution. The capacity to decentralise will have to be greatly enhanced. The challenge is to identify and clarify a logical and productive division of labour among all these agencies, as well as an optimal distribution of decision-making powers among the national and regional levels of government in the sector.

17. The division of labour within the MoE requires attention too. The challenge here is not only to create a new integrated organisation structure that will justify the rationale for amalgamating the two former education ministries, but also to create distinct and dedicated organisational homes for a number of functions that are assuming much greater significance in the Ministry in the context of ETSIP. These may include policy and strategy analysis, HRD, asset management, monitoring and evaluation, public relations, customer relations and partnerships.

18. *Objectives*: The objectives are to review the structure of the education and training sector as a whole as well as the structure of the MoE; design an improved structure for both on paper; and implement it on the ground. With respect to the decentralisation process, the objectives are (a) to translate government's general decentralisation plans into sector-specific devolution blueprints, mapping the desired distribution of authority and decision-making powers among the national and

regional authorities in each of the functions currently being carried out by the MoE; (b) to assess the capacity that will be required at the regional and local level once devolution takes place; and (c) to design and start implementing capacity building programmes at these levels.

19. *Component Description*: This component will consist of four specific activities: (a) a horizontal functional analysis to assess the division of labour among all involved in the education sector; (b) a vertical functional analysis to assess the required and likely devolution of responsibilities and authority from the national level to the regional and local levels; (c) an organisation structure analysis for the MoE; and (d) providing logistical, material and financial support for the actual implementation of the changes recommended in the three preceding activities to be designed and implemented after the three operations are completed.

20. In the first activity, a desk study will be conducted on the roles and functions of all agencies in the sector, focusing on the legal and administrative mandates of each as reflected in laws, regulations and administrative directives. An attempt will be made to determine whether the division of labour is technically sensible and whether there are any overlaps in functional responsibility on paper. The situation on the ground will then be reviewed to determine if the identified overlaps, gaps or cases of sub-optimal division of labour exists in reality. If necessary, a better division of labour and ways to eliminate overlaps and gaps will be recommended.

21. The second activity will consist of a desk study and an on-the-ground situation review attempting to determine the extent of the level of decentralisation. Consultants will establish which powers to move to the regional level in each and every functional area and assess the capacity that will be required for successful decentralisation.

22. The third activity will analyse the legal mandates of the previous two education ministries to identify all the functions prescribed for them and carefully study the existing vision and mission of the MoE to obtain additional insight into potential structural requirements. The operations of the two sets of offices on the ground will be observed and alternatives devised for integration.

23. The three activities are sequential in nature, requiring continuity of approach. Each provides an input into the next. The activities will start roughly at the same time and the inputs from the review of the division of labour in the sector, as well as the inputs from the decentralisation review, will be provided for the restructuring analysis of the MoE even before the two reviews are completed. (b) All three studies will be conducted immediately and the MoE will be restructured within the first year of ETSIP, possibly in two phases to allow for the resolution of all division of labour issues.

24. *Implementation*: The first three operations will require approval of the Public Service Commission and the Office of the Prime Minister. To ensure continuity, consistency and no loss of time in this situation, the activities will be carried out by one consulting team working closely together on all three activities.

25. *Outputs and Indicators:* The output of the first activity will be a set of recommendations for consideration and approval by government, followed by action to give effect to the improved division of labour. The indicators will be a report containing the recommendations, as well as evidence of actual implementation of approved recommendations on the ground. The outputs of the second activity will consist of functional decision maps reflecting the types of decisions to be made at each level in all key functions, a report on the capacity that will be required at each level to implement the devolution and a capacity building programme followed by actual implementation. The indicators will be the reports containing the decisions, maps and the capacity building plans. The output of the third activity will be a report identifying division of labour issues in the MoE and recommending an initial new structure plus a strategy for further restructuring, if necessary. Once approved, the recommendations will be followed by immediate implementation of the approved structure. The indicators will include the consultants' report, including a set of initial TORs for each functional unit in the Ministry. These will be developed

more fully and finalised by the managers of functional units and their superiors once they receive leadership training and develop conceptual frameworks for their functions. The conceptual frameworks will be developed in the context of the component on leadership.

Component 2: Strengthening leadership in the education sector and the MoE [N$0.5 million]

26. *Challenges*: Leaders and top managers in the MoE are not sensitive enough to the fact that organisation cultures are determined by their behaviour and are not trained to respond to the needs of staff. The challenge facing the MoE is to reverse this situation.

27. *Objectives:* The objectives of this component are: (a) to improve the quality of leadership in the education sector and the MoE and (b) to begin to change the organisation culture in the MoE. The first objective has two dimensions: the MoE is the lead agency in the sector and must therefore provide direction to the sector as whole. At the same time, the MoE must provide direction to its own functional units and staff. There must be a vision for the sector as a whole, but there must also be a conceptual framework, a vision, a mission and a strategy for the MoE as a sector leader. The second objective applies just to the MoE. The first steps to evolve and change the organisation culture on will start in Phase 1 of ETSIP and continue in the following two phases.

28. *Component Description:* This component consists of: (a) leadership training and facilitation, with particular attention to conceptual frameworks, visions, missions and strategies to be provided to all persons in management positions in the MoE as well as selected young professionals who are not yet in such positions but may be considered future managers and leaders; and (b) training on organisation culture and change management to be provided to a selected team of persons representing all the professional, administrative and technical areas of work and all levels of management and to be followed by facilitated work on the development of a programme for culture change. The leadership training will focus both on the value of these tools and on the skills needed to use them. The training will be followed immediately by facilitated actual work to develop conceptual frameworks, visions, missions and strategies.

29. *Implementation:* A team consisting of the PS, his or her deputies, the under secretaries and all directors will review the existing vision, mission and strategies that the MoE has already developed for the sector as a whole, using the new tools acquired in training. The team will also formulate a vision, mission and strategies for the role of the MoE in the sector. The directors and division heads in charge of specific key functions in the Ministry will then develop a conceptual framework, a vision, mission and strategies for their own functional units. Regional directors will develop conceptual frameworks, visions, missions and strategies for their regions. This development work will be facilitated by the trainers in joint as well as individual sessions. In the second activity, a smaller number of officials will receive more advanced training on the techniques of change management. Following the general training, the team will develop a code of practice and behaviour for management and staff in the MoE. This work will be facilitated by the trainers too. The output will be reported to the PS and the MOE for review and approval. The small group of persons receiving advanced training in change management will then develop an action plan to facilitate the changes introduced by ETSIP and to promote the code of practice and behaviour.

30. *Outputs and Indicators:* The outputs of the first activity will be statements of vision and mission (a) for the education sector as a whole; (b) for the MoE as whole; and (c) for each directorate/division in the MoE. In addition, a conceptual framework will be produced for each key function. The documents containing these statements and frameworks will serve as indicators. The outputs of the second operation will be (a) a report containing the recommended code of practice and behaviour; and (b) a proposed programme to change organisation culture and management culture in the MoE. All outputs will be due by the end of Phase I. The documents containing the code and the proposal will serve as indicators.

Component 3: Strengthening general management at all levels in the MoE [N$0.5 million]

31. *Challenges*: Managers in the MoE often do not follow best practices to organise work; plan programme and budget action; coordinate, run meetings, monitor and supervise action; set objectives; create teams, motivate individuals and teams to work well, appraise their performance, reward them for good performance and hold them accountable for poor performance. Many lack the skills and the tools to do so. The challenge is to bring about a behaviour change – to introduce best general management practices and make sure that all managers comply with them. A further challenge is creating a general financial planning environment for the education planners in the MoE and the education sector.

32. *Objectives*: The objectives of this component are: (a) to train all managers in the MoE on general management; (b) to put in place adequate incentives for all trained managers to actually apply the knowledge and skills acquired in training; (c) to implement the Performance Management System in line with OPM; and to improve the general financial planning environment in the MoE and Education sector.

33. *Component Description*: This component will consist of three activities: (a) management development; and (b) implementation of the OPM Performance Management System in the MoE. The management development operation will combine training and facilitation and will consist, in turn, of a series of short, specific task-related modular training/facilitation. Each module will be devoted to one general management area from the list referred to above.

34. The training modules in the management development programme and the recipients of training will be prioritised. Since the implementation of ETSIP is a high priority, the first group of trainees will consist of all of the directors, deputy directors and other senior staff who are in charge of the various operations of the programme. The first training modules will cover project management points of view and will use these operations firstly to select management skills for training and secondly to provide concrete examples that will be used to illustrate, and practice each skill. The facilitation following training will relate directly to the management work involved in running these operations and will be delivered in one-on-one sessions. Assuming that initial training and relevant systems for the OPM will be provided by the team that develops it, this activity will consist of additional group training, if necessary, and direct one-on-one facilitation and mentoring to implement the system. Improving the financial planning environment will include training financial and education planners in financial forecasting, concepts and tools of financial planning in the public sector; programme budgeting; and general financial planning. This will be followed by aligning regional budgeting and financial planning processes with the Integrated Financial Management System at the MOF.

35. *Implementation*: All training activities in management development will be conducted in relatively small groups and each skill-dedicated module will last for a day or two. It will then be followed by individual facilitation provided by the trainers. Both the training and the facilitation will be related directly to the current work of the trainees. The modules will be delivered intermittently every three months. The activity will be carried out through Phase I as well as Phase II of ETSIP. It will be carefully monitored, evaluated and modified as necessary over time. Moreover, a position for Management Development will be established in the Facility. Training of education and financial planners in financial planning will be done through TA and relevant short term training courses tailor-made to specifications.

36. The activity to introduce the Performance Management System is a priority too. Training is to be provided by the OPM. It is envisioned that the post of an under secretary for administration on the proposed structure of the MoE could be utilised for the function of management development.

37. *Output and Indicators*: The outputs of the first activities will be higher levels of skill-mastery in the skills covered. The indicators will differ from skill to skill. In those cases where the skills

involve, for example, the setting of objective, or the production of plans, reports, TORs, budgets and similar products, a sample of the documents containing the product will be assessed for content, presentation and other quality elements. In cases where the skills involved are related to interpersonal relations and behaviour, a sample of observations will be used to determine success. In each case, the trainers/facilitators will be required to propose the indicators and indicate what data will be collected for monitoring and evaluation purpose. The output of the second activity will be a fully implemented Performance Management System. The indicator will be a measure of satisfaction with the system taken from a sample of managers and staff. The indicators for the third activity will be an effective financial management system in place at Head Office and regional offices of MOE; financial or regional planners effectively analysing regional expenditures; effective financial forecasting; and effective programme budgeting.

Component 4: Improving the management of human resources [N$3.6 million]

38. *Challenges*: In Namibia, the function of human resources management is carried out more in the mode of a personnel function than an HRD function. The Public Service Commission carries out and manages many of the personnel management tasks and the MoE assumes that any additional and complementary personnel management tasks are to be carried out by the managers of individual functional units. The MoE, therefore, does not have a dedicated organisational home for the HRD function and does not have a conceptual framework for it. The vision, mission, policies and strategies that exist were introduced by the Public Service Commission for all public servants and the MoE has not developed further derivative policies and strategies that will apply to its particular situation, except for training. Individual directors and unit managers do not have sufficient knowledge and skills to carry out the tasks of managing people at their level. The MoE is not managing the numbers, utilisation and efficiency of its staff well. The challenge is to transform the current personnel function into a fully-fledged human resources function.

39. *Component Description:* The development of a conceptual framework, a vision and a mission for the function will be undertaken under Component 2 above. This component will consist of four activities: (a) the establishment of a Directorate for HRM to upgrade the current Division for Personnel Administration; (b) the formulation of a comprehensive HRM policy; (c) the development of job descriptions for all key jobs; and (d) conducting a ministry-wide skills needs analysis to determine the skills gap, design and implement job-related training. The three first activities will commence only after the conceptual framework is developed, because the scope of work which will determine the types of jobs to be created and the potential work load which will determine the number of staff needed will be known only after the conceptual framework is completed and adopted by the Ministry. An HR director could be appointed as soon as ETSIP and the new proposed structure are effective since the director will have to participate in the leadership component and develop the conceptual framework, vision and mission for the function. Until such time, the possibility of appointing a HR person in the Facility to start off the work could be an option. The establishment of an HR directorate will include the appointment and training of all other staff, the provision of office space and equipment and the development of a computer-based HR MIS. The development of a comprehensive HRM policy will be undertaken by the new directorate. A staff opinion survey will be conducted first to help identity areas of concern and to determine employee motivation and satisfaction. The survey will form a base-line indicator for the improvement in organisation culture and management. The policy will then be developed by a team headed by HRM staff but consisting of other staff to represent all functions and levels of management. The process will be facilitated by TA. The job description activity will be conducted for all key jobs in the Ministry. It will serve as an opportunity to rationalise and enrich existing jobs and the job analysis stage which proceeds job description will not focus solely on recording current practices. Therefore, job-holders will not be asked to write their own job descriptions. The exercise will be conducted by experts who will analyse the jobs also from a productivity point of view and recommend ways to improve their design, where possible. The skills needs analysis will be conducted only after completion of the job descriptions. This is because it is necessary to compare skills required with skills available and the skills required will

be known only after the job analysis when the job descriptions will be available. Even the design of a skills survey to determine what skills are available will await the job descriptions because the content and design of the survey will be influenced by the skills' profiles in the job descriptions.

40. *Implementation:* The newly appointed director of HRM will be in charge of establishing the directorate as well as developing the HR policy. S/He will be assisted by TA in the second operation. Job descriptions, as well as the skill's needs analysis, will be done and implemented by expert TA whose briefs will be structured to ensure transfer of knowledge to two or three HRM staff

41. *Output and indicators:* The output and indicators of the component will be an operational HRM directorate, written job descriptions for all key jobs and a multi-year training programme ready for implementation.

Component 5: Improving the management of physical resources [N$0.9 million]

42. *Challenges:* The capacity of the MoE to deliver services and implement policy and plans is constrained by an inadequate provision of physical facilities – a provision that is not in line with operational requirement in terms of both quantities and specifications. This constraint is further exacerbated by two factors: (a) the current government-wide division of labour between all sector ministries and the Ministry of Works, Transport and Communication; and (b) the lack of policies, procedures and systems for many types of physical resource transactions. With respect to the first, the challenge is to reduce the dependence of the MoE on the MWTC which is overburdened with work and unable to deliver its services efficiently and on time. With respect to the second, the challenge is to improve a variety of practices, such as a system to do and monitor procurement, the keeping of adequate records (on matters such as age, usage, condition, operating costs, repairs and maintenance history), the regulation of transfers and the disposal of assets that reached the end of their useful lives. A further challenge is the absence of a procurement system, the design, coordination of procurement plans and monitoring progress in the procurement process.

43. *Objectives:* The ultimate objective of this component is to improve the timely procurement, availability, deployment, utilisation and efficiency of all assets in the MoE. The immediate objective is to build up the function of asset management within the Ministry, reduce the dependency on MWTC and thereby improve asset management.

44. *Component Description*: Six types of key assets are owned by the MoE: land, buildings and facilities, office information and communication technology, office furniture and other equipment, vehicles and textbooks, including instructional materials. The component will consist of: (a) the enhancement of the Division Administration and Support Services to include the function of asset management; (b) the development of a comprehensive asset management policy; and (c) the introduction of computerised asset management systems for each of the types of assets. The establishment of this division will include the provision of office space, furniture and equipment, the appointment and technical training of staff and the creation of adequate, earmarked budgetary provision for the maintenance and servicing of all types of equipment. The development of the asset management policy will include general policy directives, operational norms, and minimum standards for the provision of assets to different types of offices. The policy directives will be formulated in the context of existing treasury regulations on stock control. The operational norms and minimum standards will be formulated in the context of existing norms as well as decentralisation requirements. National norms and standards already exist for school level equipment.

45. The introduction of an asset management system will include the procurement of off-the-shelf systems and their adjustment, the training of staff to use these systems and the development of the initial data bases. One by-product of these activities will be an assessment of the size and distribution of the physical resource gap for each type of resource in the education system. This

will be achieved by comparing existing stocks with the minimum standards of provision. This component will be implemented during the first and second phases of ETSIP. The establishment of a division for asset management systems for specific assets will start in Phase I and continue in Phase II, based on an order of priority. The first system to be introduced based on this order will be fleet management for all vehicles of the Ministry. Another important issue which will receive early attention is the establishment of a procurement system which will include drawing up, updating and monitoring the implementation of procurement plans.

46. *Implementation*: The Directorate: General Services will enhance the division which will develop the comprehensive asset management policy and introduce the new asset management system into the MoE with the help of TA. The manager of the division will be in charge of these operations. The procurement system will be devised with the assistance of a consultant and capacity will be developed in General Services to run the system.

47. *Outputs and indicators*: The output of the first activity will be a re-organised, fully operational division in the Directorate: General Services working, among others, on the development of asset management policy. The output of the second activity will be the asset management policy and the indicator will be the policy document. The outputs of the third activity will be the systems of asset management, including an operations' manual for each aspect; the indicators will be asset management reports produced by these systems. A further output would be a well-managed procurement system and process with its relevant policies and guidelines.

Component 6: Improving the management of information and knowledge [N$ 0.1 million]

48. *Challenges*: Although the importance of information is recognised in the Ministry, as evidenced by the existence of EMIS, the supply and use of information and the provision of good analysis are limited. Information is not being shared efficiently both internally and externally. Partly because of this, the demand for information and analysis is weak. Strategic, long term decisions and operational short-term decisions are made by managers, but the information supporting them is not as complete as needed and even not as complete as the information already available through EMIS. Equally, the analysis on which they are based is not as strong as the analysis needed, or as the analysis that can already be done with the information available. The challenge is to reverse this situation.

49. *Objectives*: (a) to improve the collection, collation, storage and analysis of relevant information; and (b) to enhance its dissemination and use internally in making decisions and externally in public debate, in dialogue with beneficiaries, partners and other stakeholders.

50. *Component Description*: The component will: (a) create an integrated organisational home for knowledge management, including data collection, analysis and application and integrating it with EMIS; (b) design and implement an Information and Reporting Needs Analysis; and (c) produce general-purpose and special-purpose management reports and introduce them into the daily management of the Ministry. The first activity will consolidate all operations aimed at the collection processing, storage and analysis of data under one roof. Although the data will be used for different purposes, including education planning, policy research, M&E and briefing, much of it will be identical or complementary. PAD will develop a conceptual framework for the newly conceived function, develop terms of reference, define the types of jobs and the staffing requirements, formulate job descriptions and appoint the staff. The activity will include the provision of office space and equipment as well as training for staff. In the second activity PAD will review selected operational areas, such as the running of school sub-systems at regional level, or the procurement, storage, distribution and use of textbooks, and analyse: (a) the types of decisions regularly made in these areas; (b) the types of report, information and analyses currently used in making these decisions; and (c) the types of additional/different report, information, or analyses that could improve the quality of the decisions these areas. The third activity will be undertaken only if the analysis on information needs concludes that the quality of operational

decision can be significantly improved by the availability of existing and/or additional information and analysis packaged well in management reports and distributed regularly and automatically to the members of management. The activity will consist of: (a) activities aimed at adding information to existing data collection systems, or putting in place mechanisms to collect (more frequently) information needed; (b) the design of practical, useful ratios and other quantitative analyses that can be generated automatically when data is entered and will be delivered with the data; (c) the design of reporting forms; (d) the development of software systems; and (e) the introduction of reports.

51. *Implementation*: All activities in this component will be implemented by PAD, the second and third with the help of TA. Management responsibility for all activities will rest with PAD.

52. *Outputs and Indicators*: Analyses that can be generated automatically when the data is entered and will be delivered with the data: (a) design of the reporting forms; (b) development of the software systems; and (c) introduction of the reports. The output of the first activity will be a division in charge of knowledge management and information. The indicator of its production will be an operational unit with staff, offices and equipment in place. The output of the second activity will be an assessment of information needs with conclusions on the utility and feasibility of producing operational reports and a set of recommendations on the types of report to be produced. The indicator will be a report containing the assessment and the recommendations. The output of the third activity will consist of actual reports and the indicator will be their dissemination to the concerned managers.

Component 7: Advocacy [N$1.8 million]

53. *Challenges*: ETSIP was developed over a period of two years. Although regions were visited and stakeholders were informed of progress via conferences and meetings, the programme needs to be taken to the Namibian nation to gain their full understanding and support and establish a sense of ownership.

54. *Objectives:* The objectives of the ETSIP Advocacy Programme are to: (a) Create public awareness of the objectives of ETSIP and the useful benefits that it will bring (including some intended quick wins.); (b) Sensitise the public on how far the Ministry is with the ETSIP Programme and how implementation will be done; (c) Inform the public, and especially implementers, about what is expected from each of the actors or stakeholders; and (d) Gain the understanding, support and participation of key stakeholders in ETSIP implementation.

55. *Component Description:* A national awareness campaign will be organised to introduce ETSIP and its sub-programmes to all levels of the Namibian society with a view to getting them to appreciate, accept and own the process and the programme. In this way they will be fully involved in the promotion and implementation of ETSIP at all levels. Within the framework of decentralisation, ETSIP will be taken to the people through various regional structures, including the involvement of regional and local authorities and the media. One item on this agenda will be a national conference on ETSIP and this will be included in the operation. Another item will be a mechanism for learners, parents, communities and the general public to lodge complaints and ideas with the Ministry. The component also needs to cover activities which could facilitate the flow of information between development partners, the MoE and other ministries or agencies. A system for sending and receiving text messages (sms) will be set up. An e-mail list server will also be utilised.

56. *Implementation:* The advocacy campaign will be developed by an advertising agency in co-operation with the MoE. A weekly radio programme will disseminate information and newspapers and billboards will be used. A team of Ministry officials will be designated to work with the agency preparing the materials.

57. *Outputs and Indicators:* Information on the programme and its implementation will be shared on a regular basis with all stakeholders ensuring buy-in and participation. Another output will be a system for the provision of ideas, suggestions and complaints from the public, from employees and from the clients/beneficiaries.

Component 8: Funds mobilisation, development partner coordination and management of assistance [N$15.4 million]

58. *Challenge:* The MoE is currently facing the problem of scarcity of financial resources to deliver satisfactory education services to the Namibian people. The current budget allocation is inadequate to meet the demands of the increasing population in schools. Therefore, more partners are needed who could be approached and requested to assist the MoE financially. There is need to consult these partners and to coordinate resources and information emanating from development partners.

59. Among the most active partners currently are the multi-lateral and bilateral aid agencies, some NGOs and the private sector. Other partners can be brought to the table, or participate more actively, as well. Among them are the public as a whole, Parliament, and the press. The contributions that partners can make to the education sector are in the form of financial aid, technical assistance, constructive criticism, the injection of new ideas and support for change. Together, these contributions make partnership a strategic resource.

60. The MoE must develop the conceptual framework for development partner involvement and contribution, create a vision and a mission for their role, make strategies on how to engage them and actually get into the engagement process. Currently the MoE is not dealing with partnerships as a strategic resource. One key example has to do with technical assistance. The MoE receives much technical assistance, but has limited capacity to manage it. The quality of the assistance received is not always adequate and there is little, if any, transfer of knowledge. The challenge is to enhance partnerships and to greatly improve their management.

61. *Objectives:* (a) To increase the number of partners and the number of partnership engagements and to enhance their contribution in all of the areas mentioned above; (b) To establish a system for fund mobilisation and donor coordination; (c) To identity or affirm programmes and projects to be funded in consultation with respective Directorates/Regions; and (d) To manage technical assistance.

62. *Component description:* This component will include the activities that could improve the raising of funds from aid agencies. PAD will improve systems for fund mobilisation and the coordination of development partners. The MoE Budget Committee will make recommendations to senior management on how the available funds could be allocated or re-allocated and disbursed. PAD will also track pledges and contributions and follow up with potential and existing development partners on the disbursement and release of funds.

63. The Division Administration and Support Services will manage TA pro-actively. The Ministry will develop a conceptual framework and terms of reference for this function. The division will develop an agenda for action and use the procurement plans and other relative ETSIP documents to guide their work and coordinate and manage TA.

64. *Implementation:* PAD will take be responsible for development partner coordination and fund mobilisation, while the Division Administration and Support Services will take responsibility for the management of TA.

65. *Outputs and indicators*: One output will be revised descriptions of systems for these functions. The indicators will be written documents containing the conceptual framework and strategies. Indicators will include the amount of money pledged by development partners and the amounts actually received in cash or kind.

Component 9: Capacity Building and Procurement [N$ 3.9 million]

66. *Challenges*: The procurement function in the MoE is crucial especially to the implementation of ETSIP. The total number of contracts negotiated is increasing substantially, while the MoE has limited professional capability, experience and skill in this respect.

67. The trend regionally and internationally is for a broader scope for the procurement function in governments while the MoE's procurement function is limited to routine clerical work. The professional enhancement of the function of procurement in the MoE is therefore called for.

68. *Objectives*: (a) To increase the number of staff in the procurement sub-division of the MoE; (b) To enhance the capabilities and skills of staff responsible for procurement including professional staff within programmes; (c) To expose staff in the procurement sub-division to professional training.

69. *Component description*: This component will improve and maintain the provision of efficient and effective provision of procurement services in the MoE. It includes three activities: (a) increasing the number of staff for the procurement function in the MoE. (b) hiring of at least two professional procurement consultants for a period of two years to assist with the alleviation of the current workload and to ensure skills transfer; and (c) capacity building for the procurement function in the MoE.

70. *Implementation*: The Deputy Director for Administration and Support Services will be in charge of determining the required number of staff for the procurement function in the MoE. He/she will be assisted by TA to determine the required number of staff as well as the skill needs analysis. The creation of posts will be pursued with the Office of the Prime Minister. The TA will ensure transfer of skills to staff in the sub-division.

71. *Outputs and Indicators*: The output of this component will be a professional, re-organized and fully operational sub-division within the directorate: general services in the MoE satisfying client procurement needs.

PROGRAMME IMPLEMENTATION ARRANGEMENTS

1. ETSIP is conceived as a comprehensive and balanced sector improvement programme. Consistently, its implementation will follow the basic principles of a SWAP. First among these principles is the *use of existing government structures for the delivery of the education and training system*. Implementation will therefore be mainstreamed within the regular government structures that are responsible for the key sub-programmes, cross-cutting areas; and support systems such as for procurement, financial management and monitoring and evaluation. Cognisant of inadequacies in the implementation capacities of current structures to effectively implement this enhanced sector programme, programme preparation includes a rigorous assessment of **all** core, and support structures. This will include structures of the education sector ministries, and other key ministries such as the Ministry of Works, Transport and Communication, the National Planning Commission and the Ministry of Finance. Following on respective assessments, capacity development interventions will focus on strengthening existing government structures.

2. The second principle is focused and balanced support for the agreed programme. As a SWAP, ETSIP represents a government-led, government coordinated, coherent, comprehensive and balanced sector improvement programme. Programme cycles set parameters for all external - to the government that is - support to the sector. Within the set time framework, all external support will, and must, fit within the framework of ETSIP.

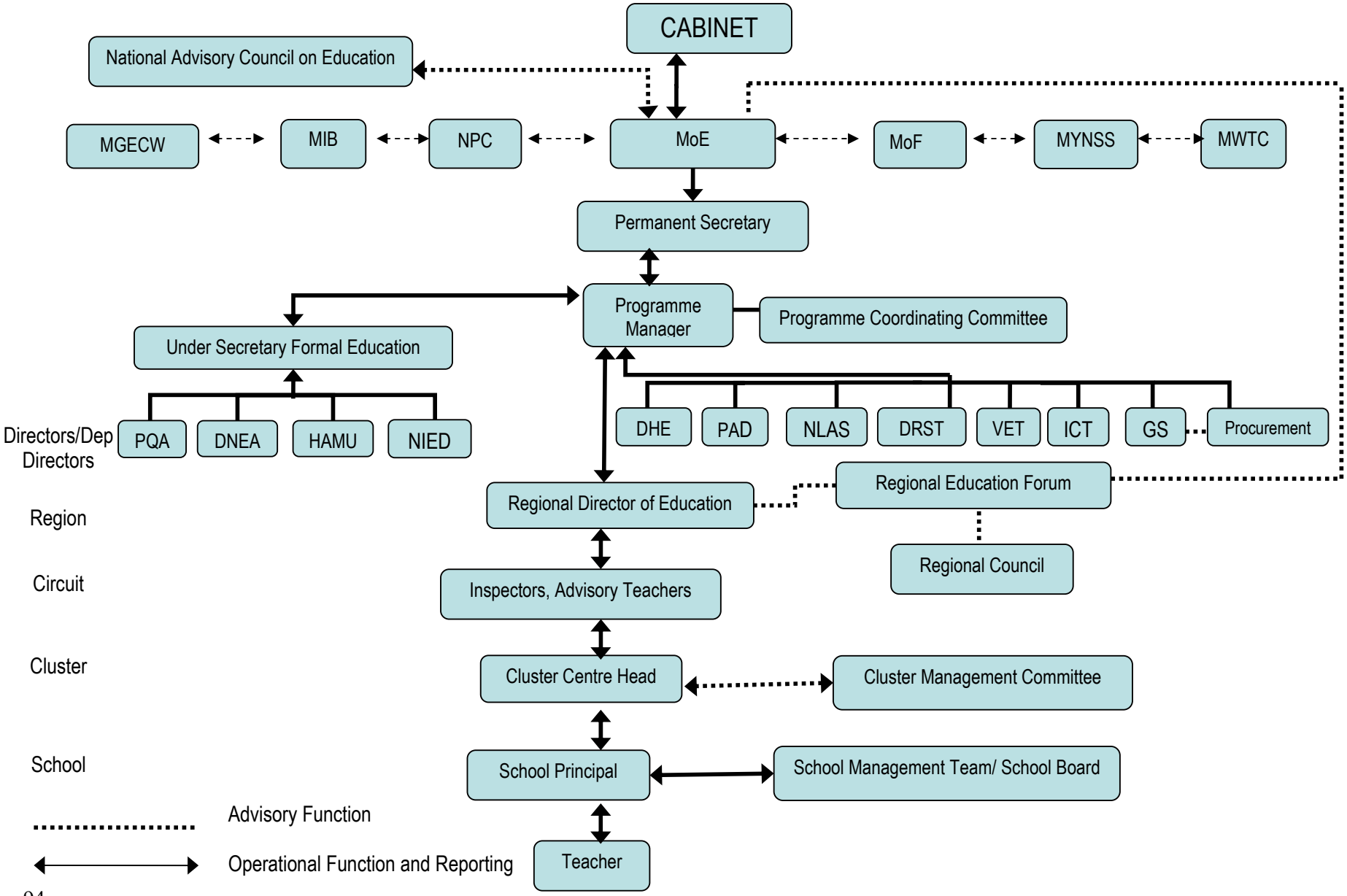
3. The third principle is strong government leadership and coordination of all external partners. The third principle will only be held, if the government is clear and strong at channelling all external support to what have been identified as priority components of the programme.

4. The fourth principle is the harmonisation of external partners' procedures. Where external partners have diverse procedures that are dictated by their authorising environments, considered effort should be made to harmonise those procedures. This harmonisation process is critical for cutting the transaction costs on the government and in conversing implementation capacity for what it should be expended on: the real implementation of the programme. Among key points for the harmonisation of procedures are: (a) joint implementation support missions; (b) periodic joint assessment of implementation progress and progress toward the attainment of strategic programme objectives, conducted along the lines of the current joint annual reviews; (c) joint substantive and financial reporting system; and (d) joint audits and other accountability systems.

5. The harmonisation of procedures will culminate in a joint memorandum of understanding (MoU) that spells out the 'rules of the game' and consequences for violation. The government will prepare the MoU in consultation with external development partners. Signatories of the MoU will include the government and all external partners that financially and/or technically support ETSIP.

6. The fifth principle is that of constructive flexibility. As a SWAP, ETSIP will be supported through a range of financing modalities including: (a) parallel financing especially for partners whose authorising environments do not allow for the pooling of funds; (b) joint financing with funds earmarked to the sector; (c) joint financing without any earmarking; etc. What will remain sacred is the integrity of the programme and its balanced support.

7. With the above principles in mind, the implementation of ETSIP will be strategically anchored within the implementation of a broader national development strategy as guided by *Vision 2030* and national development plans (NDPs). Its implementation structure therefore extends beyond the education sector ministries. In the final analysis its effective implementation has to be accounted for, by the education sector ministries, to the national executive. The overall implementation structure is summarised through the organogram below.


CABINET
National Advisory Council on Education
MGECW
MIB
NPC
MoE
MoF
MYNSS
MWTC
Permanent Secretary
Programme Manager
Programme Coordinating Committee
Under Secretary Formal Education
Directors/Dep Directors
PQA
DNEA
HAMU
NIED
DHE
PAD
NLAS
DRST
VET
ICT
GS
Procurement
Regional Education Forum
Regional Director of Education
Regional Council
Region
Circuit
Inspectors, Advisory Teachers
Cluster
Cluster Centre Head
Cluster Management Committee
School
School Principal
School Management Team/ School Board
Teacher
Advisory Function
Operational Function and Reporting

Cabinet:

8. Will maintain the overall oversight and monitoring of the contribution of the education and training sector to the actualisation of the aspirations of *Vision 2030* and for the contribution of the sector to the attainment of the strategic goals of National Development Plans (NDPs). Cabinet will play this role through the National Planning Commission. In turn, the Director General of the NPC will meet this role through the Minister of Education.

Minister of Education:

9. Will be ultimately responsible for the successful, timely, and effective development and implementation of ETSIP. Working closely with the Minister of the MoF and the DG of the NPC, s/he will also be responsible for:
    (a) the oversight of the entire programme and for ensuring the success of its implementation and the attainment of strategic objectives. S/He will be accountable to Cabinet for the success of the sector improvement programme and will periodically brief Cabinet on progress made;
    (b) strengthening national and international partnerships for the development of the sector, and for the implementation of ETSIP;
    (c) raising funds to ensure adequate financing of the improvement programme, in close consultation with the Minister of Finance;
    (d) constantly appraising the DG of the NPC on progress toward programme implementation and attainment of strategic goals and objectives; and
    (e) holding his/her staff accountable for the effective delivery of education services within the context of ETSIP.

Minister of Finance:

11. Will:
    (a) in close consultation with the Minister of Education raise funds to ensure adequate financing of the improvement programme;
    (b) monitor, advise and assist in the procurement and disbursement of funds.

Director General of the National Planning Commission:

12 Will be responsible for:
    (a) ensuring that the strategic objectives of ETSIP remain in line with the strategic outlook of *Vision 2030* and the strategic objectives of National Development Plans;
    (b) monitoring the adequacy of the contribution of the sector to the attainment of the strategic goals and objectives of rolling NDPs;
    (c) liaising constantly with the Minister of Education to ensure synergy of strategies, goals and outputs.

Permanent Secretary and Deputy Permanent Secretary:

18 Will provide organisation and leadership and maintain overall supervision of all directors of the MoE to ensure that they effectively implement the ETSIP components within their directorates according to the implementation plan.

Programme Manager:

14 During programme preparation, the Programme Manager will report directly to the Permanent Secretary/Deputy Permanent Secretary who will provide technical quality guidance and control for programme development.

15 During programme implementation, the Programme Manager will report to the Chairperson of the ETSIP Programme Coordinating Committee (EPCC) who will be the Permanent Secretary/Deputy Permanent Secretary.

16 The Programme Manager will be responsible for:
    (a) daily management, leadership, oversight and overall coordination of programme implementation;

(b) ensuring effective implementation of the programme;
(c) co-ordinating the overall implementation of ETSIP within the different directorates of the MoE and across all concerned Ministries/Offices/Agencies;
(d) liaising between concerned Ministries/Offices/Agencies and the MoE as well as the development partners and other funders;
(e) ensuring that all programme implementation activities are carried out in a coordinated and articulated manner;
(f) ensuring that all programme implementation activities are consistent with programme objectives and strategies
(g) ensuring that operational plans and manuals, annual work plans and budgets, procurement plans, financial management plans and disbursement plans are drawn up, implemented, adhered to and revised when necessary, in a coordinated manner, across the Education Sector Ministries and Directorates and non-governmental entities that will implement ETSIP components and activities;
(h) acting as Secretariat for the Programme Steering Committee;
(i) ensuring implementation of recommendations of the Programme Steering Committee and maintaining communication channels within; and
(j) compiling periodic and annual reports on ETSIP activities.

ETSIP Programme Coordinating Committee:

17 Will periodically review progress in implementing ETSIP and advise on issues as they arise.

18 The Programme Coordinating Committee will consist of:
(a) Permanent Secretary/Deputy Permanent Secretary, MoE (Chairperson);
(b) Programme Manager (Secretary)
(c) Team Leaders of the Sub-programmes;
(d) Director: PAD;
(e) Representatives of the Ministry of Finance and the NPC;
(f) Administrator of the Facility;
(g) Representatives of the Development Partners; and
(h) Other members at the invitation of the Permanent Secretary, MoE.

Under Secretaries: Ministry of Education:

19. Will be responsible for:
(a) overseeing and co-ordinating the implementation of the sub-programmes;
(b) ensuring the attainment of programme objectives;
(c) ensuring that the periodic monitoring and evaluation of the attainment of programme objectives are undertaken; and
(d) ensuring that impact assessments are undertaken to ensure that the programme delivers on its goals.

Directors of the Ministry of Education:

20. Will be responsible for ensuring effective implementation of the ETSIP components that fall within their directorates. They will report directly to the relevant Undersecretary who, in turn, reports to the Permanent Secretary/Deputy Permanent Secretary. The Director PAD, especially, will be responsible for:
(a) monitoring and evaluating the attainment of programme objectives;
(b) undertaking periodic monitoring and evaluation of the attainment of programme objectives;
(c) undertaking impact assessments to ensure that the programme delivers on its goals strategic plan as necessary;

Directors of other Education Sector Ministries:

21. Will be responsible for ensuring effective implementation of the ETSIP components that fall within their directorates.

FINANCIAL FRAMEWORK FOR THE PROGRAMME

1. The education and training sector in Namibia has been a budget priority absorbing more than 20% of total government expenditure and 7% of GDP. While the sector has used these resources to expand access to education, several challenges remain, including improving the quality of education services, expanding equitable access to senior secondary and vocational training, as well as the selective expansion of tertiary education in response to national socio-economic development goals. Addressing these challenges has become exacerbated in recent years by a trend change in resource availability which in the absence of efficiency gains in key cost drivers (such as salaries) has meant cuts in discretionary areas (such as textbooks) affecting the current and future performance of the sector.

2. The projections below are based on thorough research on the actual costs and outputs in the education sector. It uses available EMIS information as the non-financial information base, with the corresponding year of actual spending information for the financial information, combined in a simulation model for the sector that integrates various sector dynamics. The identification of areas for potential efficiency savings is the result of several research studies, both internal to the Ministry of Education and through Development Partners, into sub-sectors and cross-cutting issues over the past two years. The costing of the additional ETSIP activities is the result of a *reiterative* costing process which included financial planners and sub-programme leaders, firstly to aid the prioritisation process and secondly to ensure that both the financial and non-financial information going into the calculation of cost is robust.

Current financial trends in the education sector

3. In the absence of any constraints imposed on the main cost drivers of the sector through changes to existing education policies, the sector will face both a decline in quality of education provided (through a decline in the provision of key inputs) and an over expenditure on its allocated Medium Term Expenditure Framework (MTEF) ceiling. The projected gap between revenues available to the sector and expenditure is estimated at N$1.56 billion over the next five years (table one).

4. This over expenditure underlines the need for structural reform in the provision of education. It is mainly driven by increases in learner numbers, slow implementation of current staffing norms for teachers, salary increases projected as an average of actual increases awarded in the past three years and an increase equal to inflation on other inputs into the sector not sensitive to learner numbers. These factors have led to the development of efficiency savings grounded in ETSIP, which by aiming to tackle the significant cost drivers in the Ministry, substantially reduce the projected shortfall.

Total resource requirements to implement ETSIP

5. The two tables below summarise the projected revenue and expenditure the Ministry of Education is expected to face over 5 years for the implementation of ETSIP activities and the continuation of on-going activities. Expenditure projections are based on current costs resulting from current policy and implementation trends, the achievement of target efficiency savings for the sector as a whole and the additional cost of new activities attached to each ETSIP sub-programme.

Table 1: Projected revenue and expenditure of the Ministry of Education for *on-going activities* only, over the first phase of ETSIP implementation (2006/07 – 2010/11)

	N$ millions	2006/7	2007/8	2008/9	2009/10	2010/11	2006/7 to 2010/11
	Revenue						
A	GRN Operational Budget (not including the government contribution to ETSIP)	2,971.6	3,352.3	3,629.5	3,735.0	3,874.4	17,562.8
B	GRN Development Budget	132.9	130.2	138.0	138.0	148.5	687.4
C	Total GRN (A+B) *	3,104.5	3,482.5	3,767.4	3,873.0	4,022.9	18,250.3
D	**Total Revenue Available (C)**	**3,104.5**	**3,482.5**	**3,767.4**	**3,873.0**	**4,022.9**	**18,250.3**
	Expenditure						
E	Forward projection of baseline expenditure (without ETSIP activities)	3,493.0	3,664.3	3,942.1	4,213.4	4,499.8	19,812.6
F	Projected efficiency savings (ETSIP)	105.7	233.5	359.8	468.5	581.4	1,748.9
G	Forward projection of total expenditure accounting for efficiency savings (E-F)	3,387.4	3,430.7	3,582.3	3,744.9	3,918.4	18,063.8
H	**Shortfall/surplus without both the implementation of efficiency savings and ETSIP activities (D-E)****	**-388.6**	**-181.8**	**-174.7**	**-340.4**	**-476.9**	**-1,562.4**
I	**Shortfall/surplus with the implementation of efficiency savings, but without ETSIP activities (D-G)****	**-282.9**	**51.7**	**185.1**	**128.1**	**104.5**	**186.5**

* Not including direct budget support from Development Partners, as negotiations are underway to tie all donor support to ETSIP activities

** Where a negative number indicates a shortfall and a positive number indicates a surplus

Table 2: Projected revenue and expenditure of the Ministry of Education for *ETSIP activities*

	N$ millions	2006/7	2007/8	2008/9	2009/10	2010/11	2006/7 to 2010/11
	Expenditure						
A	**Total cost of additional expenditure for ETSIP activities**	**105.21**	**342.69**	**597.24**	**676.86**	**677.77**	**2,399.76**
	ECD/PP	1.71	8.40	14.83	10.05	11.84	46.83
	General Education	51.40	187.35	352.92	436.46	422.66	1,450.79
	Tertiary Education and Training	1.60	20.99	26.29	22.61	19.70	91.18
	VET	12.90	22.92	66.23	56.13	81.72	239.91
	ICT	19.39	63.23	79.32	89.40	93.32	344.67
	HIV/Aids	10.95	10.98	7.47	7.96	8.23	45.59
	IALL	5.50	18.78	36.18	36.06	22.56	119.09
	Capacity Development	1.31	5.56	4.89	10.54	9.83	32.13
	Knowledge and Innovation	0.44	4.48	9.11	7.63	7.91	29.56
	Revenue						
B	**GRN contribution**	**100.00**	**100.00**	**100.00**	**0.00**	**0.00**	**300.00**
C	**Pledges made at the Round Table: International Development Partners ***	**107.02**	**180.80**	**109.54**	**42.68**	**21.82**	**461.86**
	United Nations	22.78	18.91	14.90	13.42	13.48	83.48

	European Commission**	0.00	62.85	0.00	0.00	0.00	62.85
	Government of Sweden	34.20	0.00	0.00	0.00	0.00	34.20
	Government of the United States of America	32.14	32.14	27.75	16.76	0.00	108.80
	Government of Finland	0.56	0.22	0.22	0.00	0.00	1.00
	Government of Germany	7.08	25.01	0.00	0.00	0.00	32.09
	Government of Luxembourg	10.25	12.50	12.50	12.50	8.34	56.09
	Government of Spain	0.00	12.50	12.50	0.00	0.00	25.00
	Government of the Netherlands	0.00	16.67	41.68	0.00	0.00	58.35
D	**Pledges made at the Round Table: Private Namibian Development Partners ***	**0.82**	**5.39**	**5.20**	**5.20**	**4.75**	**21.35**
	FNB	0.250	0.250	0.250	0.250	0.250	1.250
	Electricity Control Board	0.010	0.010	0.010	0.010	0.010	0.050
	NAMDEB Diamond Corporation	0.200	0.000	0.000	0.000	0.000	0.200
	Omankete Investment (Pty) ltd	0.005	0.005	0.005	0.005	0.005	0.025
	Bank Windhoek	0.150	0.150	0.000	0.000	0.000	0.300
	Rössing Foundation**	0.000	4.375	4.375	4.375	4.375	17.500
	Kangulohi Trust Fund**	0.000	0.012	0.012	0.012	0.000	0.037
	Telecom Namibia	0.050	0.000	0.000	0.000	0.000	0.050
	Mr Harold Pupkewitz	0.000	0.017	0.017	0.017	0.000	0.050
	Pupkewitz Foundation	0.000	0.083	0.083	0.083	0.000	0.250
	Pupkewitz Holdings (pty) ltd	0.000	0.333	0.333	0.333	0.000	1.000
	Namwater	0.040	0.040	0.000	0.000	0.000	0.080
	Agricultural Bank of Namibia	0.010	0.010	0.010	0.010	0.010	0.050
	United Africa Group	0.080	0.080	0.080	0.080	0.080	0.400
	Mr Toivo ya Toivo	0.002	0.000	0.000	0.000	0.000	0.002
	Shell Namibia**	0.020	0.020	0.020	0.020	0.020	0.100
	Members of Parliament	0.003	0.000	0.000	0.000	0.000	0.003
E	**Total pledged financial support for ETSIP (B+C+D)**	**207.84**	**286.19**	**214.74**	**47.88**	**26.57**	**783.21**
F	**Financial shortfall/surplus for all ETSIP activities, accounting for both Round Table and GRN contributions (E-A)*** **	**102.63**	**-56.50**	**-382.50**	**-628.98**	**-651.20**	**-1,616.55**
G	**Total of additional financial contributions under discussion****	**0.00**	**119.35**	**382.48**	**591.55**	**613.83**	**1,707.21**
	GRN				100.00	100.00	200.00
	EC 9th EDF			25.01			25.01
	EC 10th EDF				166.70	166.70	333.40
	MCA		69.35	209.69	212.07	255.07	746.18
	World Bank		50.00	50.00	0.00	0.00	100.00
	Soft loans, France			97.78	112.78	92.07	302.63
H	**Financial shortfall/surplus for all ETSIP activities, accounting for both Round Table, GRN and contributions under discussion (E+G-A)***, ****	**102.6**	**62.8**	**0.0**	**-37.4**	**-37.4**	**90.7**

I	**Development Partner funds through the SRF MTEF 2007/08-2009/10**		**167.0**	**227.0**	**279.5**		

* Includes confirmation of previously committed funds at the Round Table.

** Financial amounts that still need to be confirmed with organisations.

*** Where a negative number indicates a shortfall and a positive number indicates a surplus

**** The apparent annual surpluses are caused by the lack of full alignment between funding outside the State Revenue Fund & the planned activities of ETSIP.

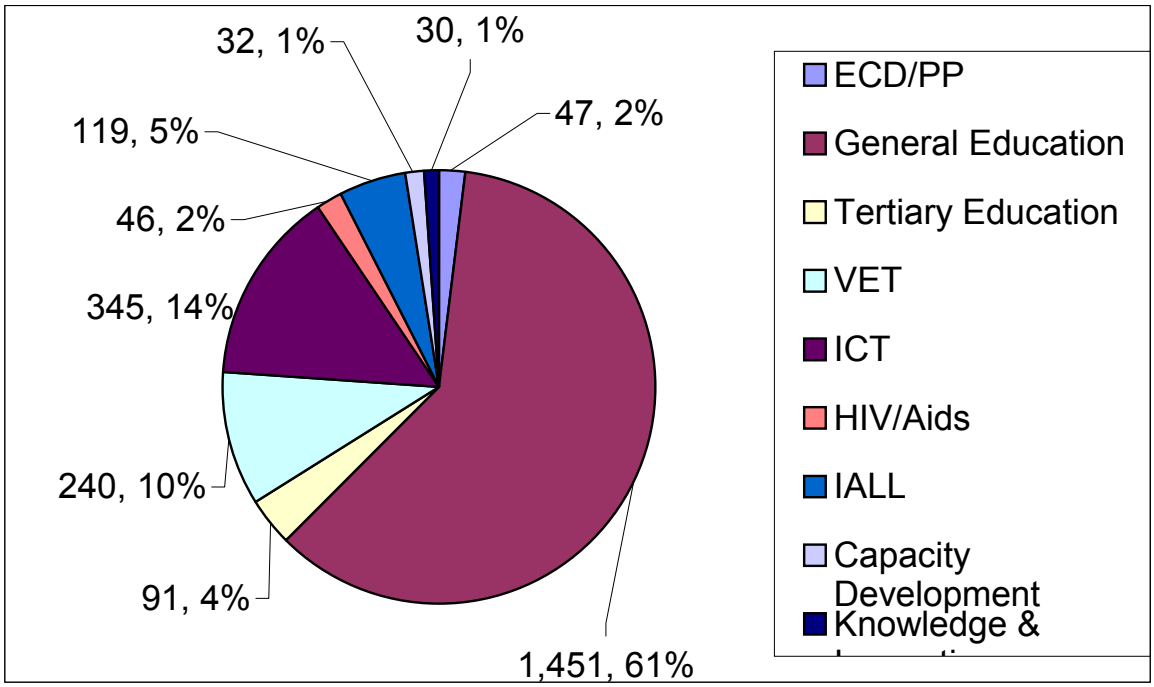
The additional cost of ETSIP

6. From table two it is evident what each sub-programme in ETSIP costs, totalling N$2.4 billion for the first five years of the programme. It is important to note that the figures provided for each sub-programme is not yet a firmed-up allocation (although very close to it), but a projection of the cost of activities as programmed. However, the costing process has included an assessment of the relative financial weight of different activities, given their contribution to the sub-programme objectives.

7. It should be noted that the ETSIP cost for the general education sub-programme, includes the cost of expanding secondary education. This is achieved by:
   (a) Improving the transition rate in grade 7 from 78% to 88% in 2011 and 95% in 2016.
   (b) Improving the transition rate from grade 10 to grade 11 from 52% to 69% in 2011 and to 80% by 2016.

8. The costing of ETSIP sub-programmes therefore also takes into account the higher demand for resources due to the improved throughput rates of learners (which is calculated at the efficiency savings unit cost as discussed below). This includes the effects on secondary education and on tertiary education (as a result of improved secondary school completion rates).

9. The pie chart below illustrates the financial contribution of each sub-programme to the total cost for all ETSIP activities.



10. Table two outlines in detail the timeline of financial contributions to ETSIP activities and consequently the expected revenue ceiling for these activities. The table indicates that given the GRN contribution, funds pledged and reconfirmed at the Round Table, and those currently under discussion, the Ministry projects that funding will be available to cover all planned ETSIP activities in the first five-year phase of implementation.

The Ministry of Education has successfully secured funding for ETSIP from a wide range of sources. Firstly, in recognition of the importance of ETSIP to the education and training sector, the GRN committed N$300 million to ETSIP over the MTEF period of 2006/07-2008/09. Secondly, with support from the World Bank and UNDP, The Ministry of Education organised a Round Table Pledging Conference in April, 2006. At the conference both International and Namibian Development Partners made generous pledges to ETSIP activities, as detailed in table two. Financial donations have since been deposited with the Ministry of Education. Thirdly, beyond the Round Table and the Appraisal of ETSIP the Ministry of Education has been involved in further discussions and proposals for future funding for ETSIP, which are still under development and negotiation. The most financially significant is the sectoral proposal to the Millennium Challenge Account.

Composition of efficiency savings

11. ETSIP suggests certain policy decisions which aim to improve the financial efficiency of the education and training sector. As indicated in paragraph 4, if efficiency savings are not implemented, the Ministry will face a substantial financial shortfall over the next 5 years. The total efficiency savings generated from the savings detailed below, are calculated at N$1.75 billion over the next five years (line F, table one). The implementation of these efficiency savings are crucial to ensure that by 2010/11 the Ministry will move from facing an annual shortfall, to a surplus of N$104.5 million. However, the efficiency savings discussed constitute a combination of hard-hitting measures, which to be implemented will require complex negotiation processes and implementation strategies.

12. Salaries are a key cost driver of the education sector. Any efficiency savings generated through controlling teacher remuneration has an enormous impact on a proposed gap. Policies to deal with salaries which are grounded in ETSIP focus on:

    (a) Amending current staffing norms to attain the implementation of a learner:teacher ratio of 36.7 for primary schools and 27.9 for secondary schools by 2011;
    (b) Increasing the ratio of support to teaching staff in schools from 5 to 7; and
    (c) De-linking salaries from qualifications.

13. The efficiency savings of improving the throughput of learners (reducing repeaters), coupled with the cost of reducing drop-out rates are also calculated into the net efficiency savings. The parameters of these savings are: from the current rates per grade, improving the promotion rate in all grades (except the transition grades, namely grade 7 and grade 10) to 92% by 2011 and 96% by 2016, and reducing repetition rates to an average of 11% for primary and 12% for secondary by 2011. While, reducing drop-out rates to 3-3.5% for primary grades and secondary grades by 2011 and to 2% for primary and secondary grades by 2016.

14. ETSIP also proposes the implementation of per capita funding as a strategic policy choice which will not only act as an efficiency measure but one which will improve the equity of education service provision across regions. The Ministry is currently in the process of determining a per-capita formula for non-tertiary allocations. The Ministry is on target to implement this policy for the 2007/08-09/10 Medium Term Plan (MTP). By extension, tertiary education transfers should also be formula based enabling efficiency savings and improving the incentives for performance of tertiary education institutions. This task is falls within the planned activities of the Council for Higher Education. The calculation of efficiency savings is based on savings on the unit cost of inputs that vary with learner numbers, and the number of students per year as calculated under the improved throughput scenario above (paragraph 14). It is important to note

    (a) that the efficiency savings scenario calculates possible savings not over current cost, but the future cost of programmes if current implementation trends continue, given likely rises in demand on account of population growth and likely rises in prices; and
    (b) that the calculation of efficiency savings presents the effort to get to as accurate as possible an estimation of a saving for the sector overall by type of cost. How these projected saving targets will be applied in practice, would clearly depend on a robust annual internal forecasting and budget process, taking into account annual fluctuations on account of demand, capacity and pricing.

15. In more detail, the following assumptions were used to arrive at the target savings amount:

    (a) *Travel and Subsistence Expenses*
    No savings are planned on the unit cost on account of the under-funding on these budgets in the current scenario, given the new GRN travel and subsistence rates implemented during this financial year. However, space for efficiency savings will be created on account of implementing the amended staffing norms (more learners per educator).
    (b) *Materials and Supplies*
    For the general education programme, care was taken to ensure that sufficient funds for textbooks are left in this funding line. Therefore, the unit cost per learner was allowed to increase with inflation (ETSIP additional cost allows for further additional spending to improve the learner:textbook ratio). A small savings occur for the first few years on account of improved throughput rates. For the other sub-programmes a 5 per cent savings per year for the first five years is included in the efficiency savings.

(c) *Property rental and related changes*
No savings are currently calculated across the education sector for property rental and related services. However, there is space to attain savings if buildings are used more efficiently, rental increases are negotiated below inflation and there is a switch to cheaper options.

(c) *Transport*
For the general education programme, care was taken to ensure that sufficient provision is made for transport, to support the ETSIP drive to improve inspection and advisory teacher services. The unit cost was therefore allowed to increase with inflation. Savings are because of improved throughput rates. For the other programmes inflation increases are also currently proposed given recent changes in the hiring of vehicles.

(d) *Utilities*
Savings on the utility bill are on account of two dynamics: firstly, the unit cost is adjusted in primary and secondary education (where its nominal value remains constant over the first five years). Historically the utility unit cost rose drastically after 2001 on the back of inefficient financing arrangements. Secondly, the improved throughput rates result in lower learner numbers for the first few years, until the improved transition rates kick in.

(e) *Maintenance Expenses*
No savings were calculated on maintenance, on account of low maintenance spending as it is.

(f) *Other Services and Expenses*
In calculating possible savings on other goods and services, the School Feeding Programme and the hostel catering costs were separated out first. For these two costs, the unit cost is allowed to grow with inflation, and is sensitive to learner numbers. For the other programmes the increases are below inflation.

(g) *Subsidies*
Savings on subsidies were calculated mainly in the tertiary education and training sub- programme. While savings on general education may be possible (if subsidies to private schools are phased out), the caution was that the existing level of subsidies may rather be re-distributed to fund schools that provide education services on behalf of the state for disadvantaged communities. However, savings may be realised in this line. For tertiary education, the efficiency savings scenario reduces the unit cost per student to two percentage points below inflation increases until 2010/11. Thereafter the unit cost grows with inflation.

(h) *Savings on the development budget*
The savings targeted on the development budget is on account of the improved throughput, resulting in fewer schools needed. While savings on unit cost or learner:classroom rates may be possible through double shifting, the assumption that there is also a maintenance backlog, which would imply additional cost, cancels out further savings in practice.

Integrating ETSIP with government budget systems

16. Since 2001/02, the then education ministries, have been refocusing their budgeting processes from input based to output based allocations. The Medium Term Expenditure Framework (MTEF) developed by the Ministry of Finance provides expenditure ceilings across line ministries while line ministries allocate these ceilings across priority programmes in their Medium Term Plans (MTPs).

17. At a resource level, the MTEF ceilings in MTP will inform ETSIP of the government funds available to implement objectives in ETSIP while the actual implementation of ETSIP, will be grounded in the MTPs as the sector sets to achieve its priorities and objectives. In the

development of the MTP 2006/07-08/09, a tight alignment was made between the Medium Term Plan submitted and ETSIP.

18. Seventeen programmes in the previous Medium Term Plan were reduced in line with programmes in ETSIP. Sub-programme leaders have used the development of the MTP to marry their ongoing activities with new activities relevant to their programme identified in ETSIP minimising any double counting of activities; identifying savings from discontinuing lower priority activities and reflecting their choice of activities. Programme allocations in the MTP 2006/07-08/09 therefore reflected activity prioritisation within each sub-programme by sub-programme leaders themselves, aligning itself to activities as set out in ETSIP which is the sector plan of the Ministry of Education until 2020.

19. The Ministry of Education is currently engaged in an assessment of and work on its internal programming and budgeting processes to facilitate the implementation of ETSIP and improve policy and financial management in the sector. The training of regional and head office officials in modern techniques of budgeting, financial projection models and budgetary submissions has not only improved participation in the budgetary process and its transparency, but also developed and improved the ties between planning and budgeting in the Ministry.

NATIONAL DEVELOPMENT CONTEXT

ETSIP is designed to contribute to the achievement of Vision 2030 and Namibia's broad development goals. However, the education sector is not the only contributor to such goals. A coalescing of various sectors will often be necessary to achieve accelerated change.

The following broad indicators of development should be monitored annually and used as a basis for dialogue between the education sector and the National Planning Commission and the Office of the Prime Minister.

Unemployment rate (Broad definition)
36.7 % in 2006

Youth Unemployment rate
64.6% in 2006 for age group 15 – 19; 57.4% for 20 – 24 year olds

GINI Coefficient for Income Inequalities
0.6 (preliminary) for NHIES 2003/04; 0.7 for NHIES 1993/4

Human Development Index (UNDP)
0.626 for 2006, Ranking 125/177 countries

Global Competitiveness Index (WEF)
3.74 in 2006, Ranking 84/125 countries

HIV Infection (Prevalence) Rate
2004 survey: <20 years 9.9%; 20 -24 years 18.2%; 25 – 29 years 25.8%.

Real Gross Domestic Product Growth
4.6% in 2006 estimate

Ratio of FDI to GDP
2 213 divided by 38 560 = 0.06 in 2005

Labour productivity index
(To be calculated for NDP3 from 2007)

RESULTS FRAMEWORK

ETSIP has a strong orientation toward results and thus clear focus on monitoring and evaluation. It is premised on strengthened and evidence-based programme implementation and to verification that the intended results are being realised. As implementation begins, the ETSIP results monitoring framework—outlined below—will predominantly be determined by current data sets, performance indicators and information systems (e.g., the programme review process and the EMIS). However, as implementation progresses, M&E capacity will be strengthened, data bases broadened to broaden the scope and depth of results monitoring.

Several components of the programme therefore focus on strengthening the collection and utilisation of data, and on the establishment of sub-sector specific information management systems. Accordingly, it is anticipated that these performance indicators will be refined in more detail as new standards and institutional arrangements are established. In particular, there is a need to develop disaggregated statistics that highlight access and achievement levels of learners from low-income households and from disadvantaged groups in the country.

The results monitoring framework is not an exhaustive list of indicators relevant to ETSIP. The EMIS provides a wider range of indicators that will also inform programme implementation. The intention of this framework is to focus on core 'outcome' indictors that can be used to determine whether the programme is delivering the intended improvements in the education and training sector. Despite the emphasis on outcomes, some output indicators that constitute evidence of critical policy reforms are also included. The centrepiece of the results monitoring framework is a core set of performance indicators aimed a capturing key trends in the education and training sector, and key impacts of the programme.

The monitoring activities will be undertaken by the institutions that are responsible for the key sub-programmes and cross-cutting areas. There is also a focus on verifying outcomes using independent surveys (e.g., the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)).

ETSIP Key Performance Indicators

Programme Development Objective (PDO)	Programme Outcome and Output Indicators	Use of Programme Outcome Information
To increase the immediate supply of middle-high level skilled labour to meet labour market demands and support overall national development goals	Number of children from disadvantaged communities who enter primary education having successfully completed one year of public pre-primary education increased from 0 to 7 500 by 2011 Enrolment in grade 11 increased from 14 777 in 2005 to 21 497 in 2011 Percentage of learners achieving D or better in mathematics, science and English in grade 10 increased respectively from 36.2%, 38.3% and 45.4% to 54.7%, 58.6% and 62.9% in 2011 Percentage of learners achieving D or better in mathematics, science and English in grade 12 increased respectively from 32.7%, 38.4% and 31.1% to 54.7%, 59.3% and 52.1% in 2011 National average SACMEQ test score (Reading & Mathematics) increased to 475 in SACMEQ III and 500 in SACMEQ IV Percentage of learners receiving Life Skills Education increased from 60% in 2007 to 95% in 2011 Total enrolment in vocational education and training increased from 2 733 in 2005 to 5 000 in 2011 Average annual completion rates for vocational education and training trainees increased from 56% in 2005 to 80% in 2011 Employment rates of VET graduates by category, within one year of graduation, as determined	The core set of indicators provides an overview of the ETSIP results monitoring, with a focus on key programme outcomes and impacts. This information will be used to: (a) regularly review whether the programme strategy requires modification; (b) adjust implementation arrangements to strengthen performance; and (c) provide a foundation for continuous policy development in the Namibian education and Training sector. Note: Additional work is required to confirm the baselines and to establish stretch targets

Programme Development Objective (PDO)	Programme Outcome and Output Indicators	Use of Programme Outcome Information
	by tracer studies Increase in the number of number all diploma, degree and post graduate level in key human resource categories including financial, real estate and business, natural science, social science, agro and natural resources, engineering, technicians, medical doctors, health and nurses Adult literacy increased from 84% in 2005 to 90% by 2011	

Theme 1 - Early Childhood Development (ECD) and Pre-Primary Education	Results Indicators	Use of Results Monitoring
Improving management of, delivery systems for, quality of and access to, early childhood and pre-primary education programmes	***Management*** Inter-ministerial ECD Committee operational by 2007 NIED Pre-primary Education Unit operational by 2007 Revised ECD policy disseminated to ECD centres by December 2008 Annual EMIS includes ECD and pre-primary education from 2008 300 public pre-primary education facilities that have well functioning oversight committees by 2011 ***Quality*** ECD and pre-primary education caregivers' and teachers' career path and training courses developed by 2008 By 2011, 300 pre-primary teachers meet basic competencies 300 public pre-primary education facilities meet standards for an enabling environment by 2011 ECD centres re-registered nationwide by 2011 By 2011, 40-60% of children enrolled in ECD centres meet the holistic child development index ***Access*** Number of children from disadvantaged communities who enter primary education having successfully completed one year of public pre-primary education increased from 0 to 7 500 by 2011	Inadequate progress on achieving increases in access to ECD and Pre-Primary programmes will signal the need for additional analyses and corrective action diagnostic

	Percentage of 5-year old children entering pre-primary education who meet holistic child development index (yet to be defined)	
Priorities for Strengthening Monitoring and Evaluation Note: These indicators will be further elaborated to incorporate measures of access by children from low-income households and from disadvantaged groups in the community (orphans and vulnerable children (OVCs) and children from marginalised groups such as the San, the Ovahimba and the Riemsvasmaker communities). Further refinement of performance indictors is dependent on the establishment of norms and standards in this sector (e.g., curriculum revision, pre-service training programmes, materials development, support and quality control mechanisms, classroom construction and the establishment of a pre-primary career structure). Disaggregated data by region will be an important initial step in addressing equity issues (e.g., comparing access and achievement in disadvantaged regions with national averages).		

Theme 2 - General Education	**Results Indicators**	**Use of Results Monitoring**
(i) The improvement of education quality; (ii) ensuring equality of opportunity, (iii) access to quality senior secondary education; and (iv) improving system management and efficiency	***Quality*** Percentage of learners achieving D or better in mathematics, science and English in grade 12 increased respectively from 32.7%, 38.4% and 31.1% to 54.7%, 59.3% and 52.1% in 2011 *Table 2(a)* Percentage of learners achieving D or better in mathematics, science and English in grade 10 increased respectively from 36.2%, 38.3% and 45.4% to 54.7%, 58.6% and 62.9% in 2011 *Table 2(a)* Percentage of learners achieving D or better in mathematics, science and English in grade 8 *Table 2(a)* Percentage of learners achieving D or better in mathematics, science and English in grade 5 *Table 2(a)* SACMEQ test score*(Reading & Mathematics) Table 2(b) & 2(c)* School performance index from National Standards for schools, by region and type (phase) of school to reach 3 by 2011 *Table 2(d)*	Inadequate progress on these key performance indicators will signal shortcomings in programme implementation and point to the need for diagnostic analyses to address access and quality objectives

	Percentage of school managers on performance agreements *Table 2(e)* Percentage of teachers licensed per phase of education *Table 2(f)* Percentage of schools meeting the targeted textbook ratio of 1:2 in core school subjects, Math, English and Sciences, at primary and secondary (*no baseline yet*) *Table 2(g)* ***Equity*** Percentage of schools that meet input norms per phase and region *(no baseline yet) Table 2 (h)* Policy on inclusive education accepted by Cabinet by 2010 ***Access*** Enrolment in grade 11 increased from 14 777 in 2005 to 21 497 in 2011 *Table 2(i)* Net enrolment rate in primary and secondary education *Table 2(j)* Percentage of OVCs enrolled in each phase of education *(no baseline yet) Table 2 (k)* ***Efficiency*** Learner:Teacher Ratio across the regions *Table 2(i)* Survival rates to grades 5, 8 and 11 *Table 2(m)* Repetition rates in grades 1, 5 and 8 *Table 2(n)*	

Priorities for Strengthening Monitoring and Evaluation

The General Education component includes a range of activities associated with strengthening the EMIS. This will enable further refinement of the ETSIP performance indicators, including the participation and completion of learners from low-income households and the access and achievement levels of learners from disadvantaged groups. In addition to the indicators identified above, an additional indicator will be developed concerning the percentage of schools meeting their annual academic performance targets.

Theme 3 - Vocational Education And Training	Results Indicators	Use of Results Monitoring
i) Strengthen the management capacity of the VET system ii) Improve the quality of VET iii) Mobilize resources for training and use them efficiently iv) Expand VET outputs to meet labour market demands	***Management*** The NTA is established with majority employer and employee representatives on the board All VTCs self-governing by 2011 ***Quality*** Employment rates of VET graduates by category, within one year of graduation, as determined by tracer studies Percentage of VET instructors meeting required competency levels ***Efficiency (resource mobilization)*** Amount of funding available for VET through levy ***Access/Equity*** Total enrolment in vocational education and training increased from 2 733 in 2005 to 5 000 in 2011 Average annual completion rates for vocational education and training trainees increased from 56% in 2005 to 80% in 2011 COSDECs enrolments increase from 495 in 2005 to 3000 in 2011 Completion increases from 65% to 85% ***Labour market demands*** Market shortage of key skills and the numbers of persons being trained for such gaps (to be developed)	Inadequate progress on achieving these targets will indicate the need to examine the functioning of the NTA, including resourcing and the issue of appropriate representation of employers group.
Priorities for Strengthening Monitoring and Evaluation The VET Management Information System (MIS) will be developed as part of EMIS		

Theme 4 – Tertiary Education & Training	Results Indicators	Use of Results Monitoring
(i) strengthen institutional capacity of tertiary education (ii) improve the quality and relevance of tertiary education (iii) mobilise financial resources and use them efficiently	***Institutional capacity*** NCHE established with own secretariat by 2007 ***Relevance*** Number of successful graduates on diploma, degree and post graduate level in key national human resource categories including financial, real estate and business, natural science, social science, agro and natural resources, engineering, technicians, medical doctors, health and nurses *Table 4* ***Quality*** Improved completion rates and decreased length of candidature of graduates *Table 4* Enrolment in pre-entry courses and foundation courses *Table 4* ***Efficiency (resource mobilisation and utilisation)*** Percentage of each tertiary education institution's recurrent expenditure from sources other than GRN and students increased to 5% by 2011	Inadequate progress on these indicators will indicate institutional reforms and capacity development initiatives have been unsuccessful in raising the quality and the output from the tertiary sector
Priorities for Strengthening Monitoring and Evaluation There is need to strengthen tertiary sector M&E to address equity issues (e.g., access statistics disaggregated by income group, and access by disadvantaged groups). Another critical issue is measuring and benchmarking the quality of tertiary education.		

Theme 5 – Knowledge Creation and Innovation	**Results Indicators**	**Use of Results Monitoring**
(i) strengthening the policy and legal environment to support knowledge and innovation (ii) strengthening capacity for the effective coordination of the national knowledge and innovation system (NKIS) (iii) strengthening effective demand for knowledge and innovation	***Policy and legal environment*** Framework K&I Policy submitted to Cabinet by 2009 2 national sectoral policies reviewed and aligned with K&I Policy by 2011 2 new national policies developed to fill gaps identified by K&I Policy study by 2011 ***Delivery capacity and management*** The National Commission for Research, Science and Technology (NCRST) and National Research, Science and Technology Fund (NRSTF) established by end of 2007. ***Demand for knowledge and innovation*** CIET established by 2011; 5% annual increase of science and technology research publications; Survey of key NKIS and industry stakeholders verifies improved outlook for NKIS	The NKIS has many different elements and will evolve rapidly and unpredictably. The focus of this component is to establish effective processes for improved coordination among key players. These indicators, particularly the survey of key stakeholders, will be used to verify that the NKIS is being supported effectively
Priorities for Strengthening Monitoring and Evaluation. Links with the national science system		

Theme 6 - Information, Adult and Lifelong Learning	Results Indicators	Use of Results Monitoring
(i) strengthening the policy and legal framework for information service sector and adult and lifelong learning (ii) improve equity and access to high quality lifelong learning opportunities (iii) improve and strengthen equitable access to information and learning resources (iv) strengthen the quality and effectiveness of knowledge management systems	***Policy and legal frameworks*** Library and information service sector policy revised by 2010 Records Management Policy revised by 2008 NAMCOL funding formula revised by 2008 Lifelong Learning Policy accepted by 2009 ***Equity and Access to Lifelong Learning*** Adult literacy increases from 84% in 2005 to 90% by 2011 Percentage of youths (15-24 year old) that are literate Literacy disparity - gender parity index (M:F) Number of schools where family literacy programmes are available Number of educational radio programmes broadcast per year ***Equitable access to information and learning resources*** Percentage of the library and CLDC network service points providing public ICT access Adequate regional resource and study centres ***Quality and effectiveness of knowledge management systems*** Policy and management	The results monitoring for the Information, Adult and Lifelong Learning component focuses on policy review and adult literacy. Additional indicators focusing on other subcomponents will be developed when the monitoring mechanism is further developed through the research projects. It is anticipated that there will be a continuing improvement in adult literacy and the success of the National Literacy Programme. If ongoing improvements are not forthcoming, additional diagnostic work will be required to identify barriers to higher adult literacy nationwide.

	system for electronic records management and archiving in place by 2010	

Priorities for Strengthening Monitoring and Evaluation.

Additional indicator of interest:
Firms that have literacy programmes in place and functioning: Baseline data from 2003 registered 17 firms having literacy programmes. Study to be conducted during 2007.

Additional work is required on measuring literacy in vulnerable and disadvantaged communities with a view to better targeting literacy initiatives aimed at these groups (some programmes are already in place and being adopted)

Indicators for improved access to information will be refined through the library and information service sector assessment study in 2007/8.

Theme 7 - Information Communication Technology (ICT) in Education	**Results Indicators**	**Use of Results Monitoring**
(i) review and develop curriculum and content (ii) review, develop and implement training (iii) develop and deploy ICT services and support (iv) strengthen education management through the use of ICT	***Curriculum*** Development of ICT Literacy Certification (includes Foundation, Intermediate, and Advanced levels). Creation of unit standards, curriculum, and training materials for localised Foundation Level of ICT Literacy Certification Development of unit standards, curriculum, and training materials of modules for ICT Integration for Educators ***Training*** Creation of an E-Learning Centre to house all relevant e-content to be able to provide e-training. 50% of teacher educators certified in Intermediate Level ICT Literacy. 80% of teacher educators certified in ICT Integration for Educators module by end 2007	Positive trends in all of these indicators will provide a strong indication that the strategy is on track.

	Deploy ICT Services and support Creation of ICT technical standards highlighting minimum standards of ICTs for educational institutions Mapping survey to determine availability and use of ICTs Development and application of e-readiness criteria resulting in deployment priorities within each educational institution type Establish National Education Technology Service and Support Centre (NETSS) ***Education Management*** Standards and an evaluation tool developed to evaluate Educational Management Systems (EMS) for school administration Deploy EMS to at least 10 schools in 2007	

Priorities for Strengthening Monitoring and Evaluation

The M&E of ICT issues is currently weak. The targets identified above are indicative, and further work is required to establish standards, and to determine the current baseline of competency and access. When these are established, these targets will be re-assessed.

Theme 8 - HIV and AIDS	Results Indicators	Use of Results Monitoring
(i) to reduce the transmission of HIV	***Reduce transmission*** Number of learners exposed to LSE *Table 8*	The indicators selected here will be revised in 2008 after an impact study
(ii) to mitigate the social and economic impact of AIDS on the Namibian education system	***Mitigate impact*** Number of OVCs in receiving nutritional support *Table 8* Number of OVCs receiving psychosocial support *Table 8*	
(iii) to reduce teacher absenteeism	***Reduce teacher absenteeism*** Teacher absenteeism by region	
Priorities for Strengthening Monitoring and Evaluation ETSSIP HIV results indicators have been aligned with the national strategy and associated monitoring systems. A system for monthly reporting at the regional level (via RACE) will collate data on key activities such as school feeding programs, psychosocial support to OVCs, condom distribution, education and awareness efforts. This data is collected on a monthly basis, so baselines and targets will be developed in terms of average monthly measures. The monthly data is disaggregated by region. A reliable methodology for measuring teacher absenteeism will be developed in 2007.		

Theme 9 – Capacity Development	Results Indicators	Use of Results Monitoring
Improve the capacity of MoE to manage service delivery, as well as discrete projects and programmes	Organisational structure of the MoE reviewed by December 2007 Conceptual framework, vision and mission of MoE developed by December 2007, and same for all Directorates by December 2008 All managers (from the PS to Deputy Directors) in MoE trained in leadership and decision-making skills and have performance agreements by December 2008	Failure to achieve any of these indicators may mean that the Ministries will be hampered in delivering ETSIP. Appropriate corrective actions should therefore be launched immediately. .

	Regional education structures adequately staffed by December 2007 Each Directorate to have a rolling three-year training plan by April 2008 Procurement Unit established by February 2007 Operational fleet management by July 2008 Public and key stakeholders informed about ETSIP and its implementation by October 2007 Increase in the number of partners contributing to ETSIP, and the total contribution from non-GRN, Namibia sources Education Statistics for previous year available by August each year, and 15th school day statistics by May of the same year	

1(a) Percentage Access to Early Childhood Development (3 – 6 year olds)

Indicator		*Baseline*	*Target Values*					*Data Collection and Reporting*		
	Regions	2001	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 June 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Percentage of children in ECD programmes	*Caprivi*	13.9						Annual	DCECD Registry ECD sub-sector Education Management Information System (EMIS)	Directorate of Community and Early Childhood Development (DCECD) in the Ministry of Gender Equality and Child Welfare (MGECW) and National ECD Committee
	Kavango	15.0								
	Ohangwena	38.6								
	Oshikoto	38.2								
	Omusati	40.3								
	Oshana	48.3								
	Kunene	12.6								
	Erongo	37.9								
	Otjozondjupa	16.2								
	Omaheke	20.2								
	Khomas	44.2								
	Hardap	22.1								
	Karas	34.3								
	National	**31.9%**								

Note: The 31.9 baseline is found in the 2001 Population and Housing Census. More accurate figures should be obtained in 2008 through the re-registration of ECD centres and possibly through the National Household Survey at which point targets for future years will be determined.

1(b) Percentage of children entering pre-primary school who meet holistic child development index (yet to be defined)

Indicator		*Baseline*	*Target Values*					*Data Collection and Reporting*		
	Regions		**Year 1 June 2007**	**Year 2 June 2008**	**Year 3 June 2009**	**Year 4 June 2010**	**Year 5 June 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Percentage of children entering pre-primary school year who meet holistic child develop-ment index (yet to be defined)	*Caprivi*							Annual	DCECD Registry ECD sub-sector Education Management Information System (EMIS)	Directorate of Community and Early Childhood Development (DCECD) in the Ministry of Gender Equality and Child Welfare (MGECW) and National ECD Committee
	Kavango									
	Ohangwena									
	Oshikoto									
	Omusati									
	Oshana									
	Kunene									
	Erongo									
	Otjozondjupa									
	Omaheke									
	Khomas									
	Hardap									
	Karas									
	National									

Note: DCECD will explore opportunities to disaggregate this data by: gender, household income, disadvantaged groups

1(c) Percentage of children entering primary education that have successfully completed the revised school readiness programme

Indicator			*Baseline*	*Target Values*					*Data Collection and Reporting*		
	Regions	**Measure**		**Year 1 June 2007**	**Year 2 June 2008**	**Year 3 June 2009**	**Year 4 June 2010**	**Year 5 June 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Number of children entering primary education that have successfully completed pre-primary education	*Caprivi*	***# completed***	0	0	0	225	450	675	Annual	Pre-primary sub-sector Education Management Information System (EMIS)	Ministry of Education and Directorate of Community and Early Childhood Development (DCECD) in the Ministry of Gender Equality and Child Welfare (MGECW) and National ECD Committee
	Kavango	***# completed***	0	0	0	225	450	675			
	Ohangwena	***# completed***	0	0	0	225	450	675			
	Oshikoto	***# completed***	0	0	0	225	450	675			
	Omusati	***# completed***	0	0	0	225	450	675			
	Oshana	***# completed***	0	0	0	225	450	675			
	Kunene	***# completed***	0	0	0	225	450	675			
	Erongo	***# completed***	0	0	0	140	280	420			
	Otjozondjupa	***# completed***	0	0	0	225	450	675			
	Omaheke	***# completed***	0	0	0	140	280	420			
	Khomas	***# completed***	0	0	0	140	280	420			
	Hardap	***# completed***	0	0	0	140	280	420			
	Karas	***# completed***	0	0	0	140	280	420			
	National	***Total***	**0**	**0**	**0**	**2500**	**5000**	**7500**			
		% of Children entering Primary Ed	**0**	**0**	**0**	**4.7%**	**9.4%**	**14%**			

Note: Baseline data will be collected in 2008. Years 1 and 2 have zero data, because the first cohort of pre-primary learners will enter Grade 1 in 2009.
MoE will explore opportunities to disaggregate this data by: gender, household income, disadvantaged groups

1(d) Access to the Revised Pre-Primary Programme

Indicator			*Baseline*	*Target Values*					*Data Collection and Reporting*		
	Regions	**Measure**		**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Number of children aged 5-6 enrolled in pre-primary education	*Caprivi*	**#** *Enrolled*	0	0	225	450	675	900	Annual	Pre-Primary sub-sector Education Management Information System (EMIS)	Ministry of Education and Directorate of Community and Early Childhood Development (DCECD) in the Ministry of Gender Equality and Child Welfare (MGECW) and National ECD Committee
	Kavango	**#** *Enrolled*	0	0	225	450	675	900			
	Ohangwena	# Enrolled	0	0	225	450	675	900			
	Oshikoto	**#** *Enrolled*	0	0	225	450	675	900			
	Omusati	**#** *Enrolled*	0	0	225	450	675	900			
	Oshana	**#** *Enrolled*	0	0	225	450	675	900			
	Kunene	**#** *Enrolled*	0	0	225	450	675	900			
	Erongo	**#** *Enrolled*	0	0	140	280	420	560			
	Otjozondjupa	# Enrolled	0	0	225	450	675	900			
	Omaheke	**#** *Enrolled*	0	0	140	280	420	560			
	Khomas	**#** *Enrolled*	0	0	140	280	420	560			
	Hardap	**#** *Enrolled*	0	0	140	280	420	560			
	Karas	**#** *Enrolled*	0	0	140	280	420	560			
	National	# Enrolled	**0**	**0**	**2 500**	**5 000**	**7 500**	**10 000**			

Note: Baseline data will be collected in 2008. Year 1 has zero data, because the first cohort will enter pre-primary in 2008.
MoE will explore opportunities to disaggregate this data by: gender, household income, disadvantaged groups

2 (a) General Education: Percentage of learners achieving D or better in Mathematics, Science and English

			Target Values						Data Collection and Reporting		
	Issue	*Baseline gr 10 and 12 2005*	**Year 1 2006**	**Year 2 2007**	**Year 3 2008**	**Year 4 2009**	**Year 5 2010**	**Year 6 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Grade 5	*Mathematics*					*47.7%*	51.2%	54.7%	Annual	EMIS	MoE
	Science					*51.6%*	55.1%	58.6%			
	English					*55.9%*	59.4%	62.9%			
Grade 8	*Mathematics*					*47.7%*	51.2%	54.7%			
	Science					*51.6%*	55.1%	58.6%			
	English					*55.9%*	59.4%	62.9%			
Grade 10	*Mathematics*	*36.2%*	*37.2%*	40.7%	44.2%	47.7%	51.2%	54.7%			
	Science	*38.3%*	*41.1%*	44.6%	48.1%	51.6%	55.1%	58.6%			
	English	*45.4%*	*43.0%*	48.9%	52.4%	55.9%	59.4%	62.9%			
Grade 12	*Mathematics*	*32.7%*	*37.2%*	40.7%	44.2%	47.7%	51.2%	54.7%			
	Science	*38.4%*	*41.8%*	45.3%	48.8%	52.3%	55.8%	59.3%			
	English	*31.1%*	*34.6%*	38.1%	41.6%	45.1%	48.6%	52.1%			

Note: Baseline for grades 5 and 8 in 2009 is an estimate

2 (b) General Education: Learner Performance (SACMEQ Reading)

Reading	**Baseline**				**Target**			
	SACMEQ I (1995)		SACMEQ II (2000)		SACMEQ III (2007)		SACMEQ IV (2011?)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**	**Mean**	**SE**
Caprivi	430.9	2.76	417.3	4.71	430.0	TBA	455.0	TBA
Erongo	545.7	28.69	527.5	24.22	538.0	TBA	558.0	TBA
Hardap	512.3	21.79	518.7	20.27	529.0	TBA	549.0	TBA
Karas	519.8	21.86	510.4	19.49	521.0	TBA	541.0	TBA
Kavango	448.3	5.13	431.5	4.99	444.0	TBA	469.0	TBA
Khomas	585.5	22.14	567.0	18.77	578.0	TBA	598.0	TBA
Kunene	455.6	6.04	448.2	13.29	460.0	TBA	485.0	TBA
Ohangwena	444.2	3.65	416.9	3.69	430.0	TBA	455.0	TBA
Omaheke	450.3	19.04	434.4	8.23	447.0	TBA	472.0	TBA
Omusati	440.1	3.10	424.0	3.91	437.0	TBA	457.0	TBA
Oshikoto	460.3	43.51	428.3	13.38	441.0	TBA	466.0	TBA
Otjozondjupa	509.9	34.97	468.9	21.39	480.0	TBA	500.0	TBA
Oshana	451.2	8.10	429.9	7.68	442.0	TBA	465.0	TBA
National	**472.9**	**4.65**	**449.0**	**3.12**	**475**	**3**	**500**	**3**

2(c) General Education: Learner Performance (SACMEQ Mathematics)

Mathematics	**Baseline**		**Target**			
	SACMEQ II (2000)		SACMEQ III (2007)		SACMEQ IV (2011)	
	Mean	**SE**	**Mean**	**SE**	**Mean**	**SE**
Caprivi	405.2	4.03	435	TBA	460	TBA
Erongo	494.4	21.23	524	TBA	549	TBA
Hardap	499.0	17.89	529	TBA	554	TBA
Karas	482.7	18.33	512	TBA	537	TBA
Kavango	419.0	4.95	449	TBA	474	TBA
Khomas	530.5	19.06	555	TBA	580	TBA
Kunene	445.4	14.17	475	TBA	500	TBA
Ohangwena	398.8	2.65	428	TBA	453	TBA
Omaheke	426.4	5.16	456	TBA	481	TBA
Omusati	410.0	3.82	440	TBA	465	TBA
Oshikoto	420.0	13.51	450	TBA	475	TBA
Otjozondjupa	458.8	17.04	488	TBA	513	TBA
Oshana	402.4	6.79	432	TBA	457	TBA
National	**431.1**	**2.93**	**475**	**2.5**	**500**	**2.5**

2 (d) Average Schools Performance Index per Region and Phase

		Baseline	Target						
Region	**Measure**	**2006**	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Lower Primary	TBA	TBA	TBA	TBA	TBA	3	EMIS	MoE
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Erongo	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Karas	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Kavango	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Khomas	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Kunene	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Ohangwena	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Omusati	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		

	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Oshana	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Oshikoto	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
Otjozondjupa	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		
National	Lower Primary	TBA	TBA	TBA	TBA	TBA	3		
	Upper Primary	TBA	TBA	TBA	TBA	TBA	3		
	Junior Secondary	TBA	TBA	TBA	TBA	TBA	3		
	Senior Secondary	TBA	TBA	TBA	TBA	TBA	3		

2 (e) Percentage of school managers on performance agreements

		Baseline	**Target**					
Region	**Measure**	**2005**	**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Primary	0	30%	60%	90%	95%	EMIS	MoE
	Secondary	0	30%	60%	90%	95%		
Erongo	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Hardap	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Karas	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Kavango	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Khomas	Primary	0	30%	60%	90%	95%		

	Secondary	0	30%	60%	90%	95%		
Kunene	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Ohangwena	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Omaheke	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Omusati	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Oshana	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Oshikoto	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
Otjozondjupa	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		
National	Primary	0	30%	60%	90%	95%		
	Secondary	0	30%	60%	90%	95%		

2 (f) Percentage of teachers licensed per phase

		Baseline	**Target**					
Region	**Measure**		**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Primary	0	20%	50%	70%	75%	EMIS	MoE
	Secondary	0	20%	50%	70%	75%		
Erongo	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Hardap	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Karas	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Kavango	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		

		Baseline	Target					
Region	**Measure**		**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Khomas	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Kunene	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Ohangwena	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Omaheke	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Omusati	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Oshana	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Oshikoto	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
Otjozondjupa	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		
National	Primary	0	20%	50%	70%	75%		
	Secondary	0	20%	50%	70%	75%		

2 (g) Percentage of Schools Meeting the Targeted Textbook Ratio 1:2 in Mathematics, Science and English

		Baseline	Target					
Region	**Measure**	**2007**	**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Mathematics	TBA	35%	45%	55%	65%	EMIS	MoE
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Erongo	Mathematics	TBA	35%	45%	55%	65%		
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Hardap	Mathematics	TBA	35%	45%	55%	65%		
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Karas	Mathematics	TBA	35%	45%	55%	65%		
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Kavango	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
Khomas	Mathematics	TBA	35%	45%	55%	65%		
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Kunene	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
Ohangwena	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
Omaheke	Mathematics	TBA	35%	45%	55%	65%		
	Science	TBA	35%	45%	55%	65%		
	English	TBA	35%	45%	55%	65%		
Omusati	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		

		Baseline	Target					
Region	**Measure**	**2007**	**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Oshana	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
Oshikoto	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
Otjozondjupa	Mathematics	TBA	30%	40%	50%	60%		
	Science	TBA	30%	40%	50%	60%		
	English	TBA	30%	40%	50%	60%		
National	**Mathematics**	TBA	**30%**	**40%**	**50%**	**60%**		
	Science	TBA	**30%**	**40%**	**50%**	**60%**		
	English	TBA	**30%**	**40%**	**50%**	**60%**		

2 (h) Percentage of schools meet input norms

		Baseline	Target					
Region	**Measure**	**2007**	**Year 1 2008**	**Year 2 2009**	**Year 3 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Primary	TBA	TBA	TBA	TBA	TBA	EMIS	MoE
	Secondary	TBA	TBA	TBA	TBA	TBA		
Erongo	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Hardap	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Karas	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Kavango	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Khomas	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Kunene	Primary	TBA	TBA	TBA	TBA	TBA		

	Secondary	TBA	TBA	TBA	TBA	TBA		
Ohangwena	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Omaheke	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Omusati	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Oshana	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Oshikoto	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
Otjozondjupa	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		
National	Primary	TBA	TBA	TBA	TBA	TBA		
	Secondary	TBA	TBA	TBA	TBA	TBA		

Note: Formulae are still to be agreed on, thus no proper projections could be made yet.

2 (i) Grade 11 intake per region, gender and physical science

Region	**Total Grade 11**	**Baseline 2005**		**Year 1 2006**		**Year 2 2007**		**Year 3 2008**		**Year 4 2009**		**Year 5 2010**		**Year 6 2011**		**Data Source**	**Responsibility**
		Enrol	**P.Sc**	**Enrol**	**P.Sc**	**Enrol**	**P.Sc**	**Enrol**	**P.Sc**	**Enrol**	**P.Sc**	**Enrol**	**P.Sc**	**Enrol**	**P.Sc**		
Caprivi	Female	479	22.8%	499	24.3%	519	25.6%	539	26.8%	559	27.9%	579	29.0%	599	31.6%	EMIS	
	Male	516	29.8%	536	31.1%	556	32.0%	576	32.9%	596	33.8%	616	34.6%	636	37.0%		
Erongo	Female	465	51.6%	495	52.0%	525	52.2%	555	52.4%	585	52.5%	615	52.7%	645	55.2%		
	Male	405	65.9%	435	65.3%	465	64.6%	495	64.0%	525	63.5%	555	63.1%	585	65.3%		
Hardap	Female	330	42.7%	360	43.8%	390	44.6%	420	45.3%	450	45.9%	480	46.5%	510	50.0%		
	Male	286	49.0%	316	49.6%	346	49.9%	376	50.2%	406	50.5%	436	50.8%	466	54.3%		
Karas	Female	300	25.3%	330	28.1%	360	30.2%	390	32.0%	420	33.6%	450	35.1%	480	39.5%		
	Male	265	40.4%	295	41.9%	325	42.9%	355	43.8%	385	44.6%	415	45.4%	445	49.4%		
Kavango	Female	533	28.9%	583	29.5%	633	29.8%	683	30.1%	733	30.4%	783	30.7%	833	35.2%		
	Male	749	33.5%	799	33.8%	849	33.8%	899	33.9%	949	34.0%	999	34.1%	1049	37.6%		
Khomas	Female	1452	46.1%	1512	46.7%	1572	47.1%	1632	47.5%	1692	47.9%	1752	48.2%	1812	50.3%		
	Male	1340	57.1%	1400	57.3%	1460	57.3%	1520	57.3%	1580	57.3%	1640	57.3%	1700	59.1%		
Kunene	Female	138	26.1%	158	29.6%	178	32.2%	198	34.3%	218	36.1%	238	37.6%	258	42.8%		

	Male	183	35.5%	203	37.4%	223	38.9%	243	40.1%	263	41.2%	283	42.1%	303	46.3%		
Ohangwena	Female	582	55.5%	642	55.5%	702	55.3%	762	55.2%	822	55.1%	882	55.1%	942	58.3%		
	Male	488	60.2%	548	59.6%	608	59.0%	668	58.5%	728	58.1%	788	57.8%	848	61.2%		
Omaheke	Female	130	26.9%	150	30.5%	170	33.1%	190	35.2%	210	37.0%	230	38.5%	250	43.8%		
	Male	121	40.5%	141	42.3%	161	43.6%	181	44.6%	201	45.5%	221	46.3%	241	51.1%		
Omusati	Female	1345	55.4%	1405	55.7%	1465	55.7%	1525	55.8%	1585	55.8%	1645	55.9%	1705	57.8%		
	Male	1095	55.8%	1155	56.0%	1215	56.0%	1275	56.0%	1335	56.0%	1395	56.1%	1455	58.2%		
Oshana	Female	944	53.1%	1004	53.4%	1064	53.5%	1124	53.6%	1184	53.7%	1244	53.8%	1304	56.3%		
	Male	878	57.6%	938	57.6%	998	57.5%	1058	57.3%	1118	57.2%	1178	57.2%	1238	59.6%		
Oshikoto	Female	598	54.0%	658	54.1%	718	54.1%	778	54.1%	838	54.1%	898	54.2%	958	57.4%		
	Male	491	57.8%	551	57.5%	611	57.1%	671	56.7%	731	56.5%	791	56.4%	851	59.8%		
Otjozondjupa	Female	356	25.6%	416	29.6%	476	32.5%	536	34.8%	596	36.7%	656	38.2%	716	43.8%		
	Male	308	34.7%	368	37.7%	428	39.8%	488	41.4%	548	42.7%	608	43.8%	668	49.2%		
National	Female	7652	45.0%	8212	45.7%	8772	46.2%	9332	46.6%	9892	47.0%	10452	47.4%	11012	50.4%		
	Male	7125	50.5%	7685	50.9%	8245	51.0%	8805	51.1%	9365	51.2%	9925	51.4%	10485	54.3%		

2 (j) General Education: Net Enrolment Ratios

			Target Values						Data Collection and Reporting		
Survey	*Issue*	*Baseline 2005*	**Year 1 2006**	**Year 2 2007**	**Year 3 2008**	**Year 4 2009**	**Year 5 2010**	**Year 6 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Net Enrolment Ratios											
	Age Group 7-13 Grade 1-7								Annual	EMIS	MoE
	Total	*93.6%*	*94.0%*	*95.0%*	*96.0%*	*97.0%*	*98.0%*	*98.0%*			
	Female	*95.4%*	*96.0%*	*97.0%*	*98.0%*	*98.0%*	*98.5%*	*98.5%*			
	Male	*91.7%*	*92.7%*	*93.7%*	*94.7%*	*96.0%*	*97.5%*	*97.5%*			
	Age Group 7-16 Grade 1-10								Annual		
	Total	*93.0%*	*94.0%*	*95.0%*	*96.0%*	*97.0%*	*98.0%*	*98.0%*			
	Females	*95.0%*	*96.0%*	*97.0%*	*98.0%*	*98.4%*	*99.0%*	*99.0%*			
	Males	*90.9%*	*92.0%*	*93.0%*	*94.0%*	*95.5%*	*97.0%*	*97.0%*			
	Age Group 7-18 Grade 1-12								Annual		
	Total	*87.9%*	*88.0%*	*89.0%*	*90.0%*	*91.0%*	*92.0%*	*92.0%*			
	Females	*89.4%*	*90.0%*	*90.5%*	*91.5%*	*92.5%*	*93.5%*	*93.5%*			
	Males	*86.3%*	*87.0%*	*87.5%*	*88.5 %*	*89.5%*	*90.5%*	*90.5%*			
	Age Group 14-18 Grade 8-12								Annual		
	Total	*49.5%*	*51.2%*	*52.7%*	*54.0%*	*57.0%*	*60.0%*	*63.0%*			
	Females	*54.1%*	*55.5%*	*56.5%*	*58.0%*	*61.0%*	*64.0%*	*67.0%*			
	Males	*44.8%*	*46.8%*	*48.8%*	*50.0%*	*53.0%*	*55.0%*	*57.0%*			

2 (k) Percentage of Orphans and Vulnerable Children enrolled per phase

		Baseline						
Region	**Measure**	**2007**	**Year 1 2008**	**Year 2 2009**	**Year 53 2010**	**Year 4 2011**	**Data Source**	**Responsibility**
Caprivi	Primary		TBA	TBA	TBA	80%	EMIS	MoE
	Secondary		TBA	TBA	TBA	80%		
Erongo	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Hardap	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Karas	Primary		TBA	TBA	TBA	80%		

	Secondary		TBA	TBA	TBA	80%		
Kavango	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Khomas	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Kunene	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Ohangwena	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Omaheke	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Omusati	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Oshana	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Oshikoto	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
Otjozondjupa	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		
National	Primary		TBA	TBA	TBA	80%		
	Secondary		TBA	TBA	TBA	80%		

Note: There are no concrete figures on OVC yet.

2 (l) General Education: Learner:Teacher Ratios – Primary and Secondary

Region		Baseline	Target							
	Measure	2005	Year 1 2006	Year 2 2007	Year 3 2008	Year 4 2009	Year 5 2010	Year 6 2011	Data Source	Responsibility
Caprivi	Primary	**29.2**	30.2	31.2	32.2	33.2	34.2	35.2		
	Secondary	**21.5**	22	22.5	23	23.5	24	24.5		
Erongo	Primary	**29.4**	30.4	31.4	32.4	33.4	34.4	35.4		
	Secondary	**23.9**	24.4	24.9	25.4	25.9	26.4	26.9		
Hardap	Primary	**30.1**	31.1	32.1	33.1	34.1	35.1	36.1		
	Secondary	**25.1**	25.6	26.1	26.6	27.1	27.6	28.1		
Karas	Primary	**27.9**	28.9	29.9	30.9	31.9	32.9	33.9		
	Secondary	**26.0**	26.5	27	27.5	28	28.5	29		
Kavango	Primary	**31.8**	32.8	33.8	34.8	35.8	36.8	37.8		
	Secondary	**24.0**	24.5	25	25.5	26	26.5	27		
Khomas	Primary	**29.9**	30.9	31.9	32.9	33.9	34.9	35.9		
	Secondary	**24.0**	24.5	25	25.5	26	26.5	27		
Kunene	Primary	**28.9**	29.9	30.9	31.9	32.9	33.9	34.9		
	Secondary	**23.2**	23.7	24.2	24.7	25.2	25.7	26.2	EMIS	MoE
Ohangwena	Primary	**32.3**	33.3	34.3	35.3	36.3	37.3	38.3		
	Secondary	**26.1**	26.6	27.1	27.6	28.1	28.6	29.1		
Omaheke	Primary	**29.1**	30.1	31.1	32.1	33.1	34.1	35.1		
	Secondary	**23.0**	23.5	24	24.5	25	25.5	26		
Omusati	Primary	**30.5**	31.5	32.5	33.5	34.5	35.5	36.5		
	Secondary	**25.9**	26.4	26.9	27.4	27.9	28.4	28.9		
Oshana	Primary	**31.7**	32.7	33.7	34.7	35.7	36.7	37.7		
	Secondary	**26.1**	26.6	27.1	27.6	28.1	28.6	29.1		
Oshikoto	Primary	**30.1**	31.1	32.1	33.1	34.1	35.1	36.1		
	Secondary	**24.5**	25	25.5	26	26.5	27	27.5		
Otjozondjupa	Primary	**30.9**	31.9	32.9	33.9	34.9	35.9	36.9		
	Secondary	**25.6**	26.1	26.6	27.1	27.6	28.1	28.6		
National	Primary	**30.7**	31.7	32.7	33.7	34.7	35.7	36.7		
	Secondary	**24.9**	25.4	25.9	26.4	26.9	27.4	27.9		

2 (m) General Education: Survival Rates

			Target Values						Data Collection and Reporting		
Survey	*Issue*	*Baseline 2005*	**Year 1 2006**	**Year 2 2007**	**Year 3 2008**	**Year 4 2009**	**Year 5 2010**	**Year 6 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Survival rates in first grade of each phase (5, 8 and 11)^*											
	Grade 5	*89%*	*90.5%*	*92.0%*	*94.5%*	*96.0%*	*97.5%*	*97.5%*	Annual	EMIS	MoE
	Grade 8	*73%*	*74.0%*	*76.0%*	*77.0%*	*78.0%*	*79.0%*	*79.0%*	Annual		
	Grade 11	*31%*	*32.0%*	*33.0%*	*36.0%*	*39.0%*	*42.0%*	*45.0%*	Annual		

^ Data disaggregated by gender also available. Data disaggregated by region to be advised *2005EMIS used as baseline

2 (n) General Education: Repetition Rates

			Target Values						Data Collection and Reporting		
Survey	*Issue*	*Baseline 2005*	**Year 1 2006**	**Year 2 2007**	**Year 3 2008**	**Year 4 2009**	**Year 5 2010**	**Year 6 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Repetition rates in first grade of each phase (Grades 1, 5 and 8)											
	Grade 1 [6]	*18.8%*	*17.8%*	*16.4%*	*14.4%*	*13.4%*	*10.0%*	*10.0%*	Annual	EMIS	MoE
	Grade 5	*20.5%*	*19.5%*	*18.1%*	*16.1%*	*14.1%*	*12.1%*	*12.1%*	Annual		
	Grade 8	*21.5%*	*20.1%*	*18.1%*	*16.1%*	*14.1%*	*12.1%*	*12.1%*	Annual		
	Total	*13.7%*[7]	*13.6%*	*12.6%*	*11.6%*	*10.6%*	*9.6%*	*9.6%*	Annual		

[6] Repetition rate measures both drop-in learners and repeaters. In future it will be disaggregated.
[7] The repetition rates in Grade 1, 5 and 8 have historically been high. The rates are other grades are significantly lower, producing a lower total average repetition rate. Data disaggregated by gender is also available.

3 (a)Percentage of VET instructors professionally qualified

	Baseline	Target Values				Data Collection and Reporting		
Centre	***2006***	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Zambezi VTC	100%	100%	100%	100%	100%	Annual	VTCs EMIS	Initially: NTA PMU Subsequently: NTA Board & Secretariat
Okakarara VTC	100%	100%	100%	100%	100%	Annual		
Valombola VTC	62%	72%	82%	92%	100%	Annual		
Rundu VTC	98%	100%	100%	100%	100%	Annual		
Windhoek VTC	100%	100%	100%	100%	100%	Annual		
NIMT	100%	100%	100%	100%	100%	Annual		

3 (b) VET Enrolment and completion rates

		Baseline	Target Values					Data Collection and Reporting		
Indicator	***Level***	***2005***	**Year 1 2006**	**Year 2 2007**	**Year 3 2008**	**Year 4 2009**	**Year 5 2010**	**Frequency of Reporting**	**Data Source**	**Responsibility**
VTC Enrolments										
	Level 1	1160	1350	1600	1850	2100	2350	Annual	VTCs EMIS	Initially: NTA PMU Subsequently: NTA Board & Secretariat
	Level 2	892	950	1100	1250	1400	1550	Annual		
	Level 3	681	700	800	900	1000	1100	Annual		
	Total	**2733**	**3000**	**3500**	**4000**	**4500**	**5000**	**Annual**		
VTC Completion Rates										
	Level 1	49.3%	60%	65%	70%	75%	80%	Annual	As above	As above
	Level 2	57.5%	60%	65%	70%	75%	80%	Annual		
	Level 3	61.9%	60%	65%	70%	75%	80%	Annual		
	Average	56.2%	60%	65%	70%	75%	80%	Annual		
COSDEC Enrolment										
	Total	*495*	650	1150	1650	2400	3000	Annual	As above	As above
COSDECs Completion (%)										
	%Total	*65%*	65%	70%	75%	80%	85%	Annual	As above	As above

Note: EMIS to provide disaggregate data by industry group, and additional information regarding quality based on feedback from graduate employers and industry groups.

4. Tertiary Education & Training

4 (a).University of Namibia

		Baseline						*Data Collection and Reporting*		
Indicator	*Level*	*2005*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
	Pre entry Enrolment									
	Total General Enrolment	8 864	9 307	9 773	10 262	10 775	11 314	Annual	UNAM	UNAM
	Total General Graduation	1372	1441	1514	1590	1670	1754	Annual	UNAM	UNAM
	Priority disciplines:									
	1. Agriculture & Natural Resources									
	Enrolment	230	242	255	268	282	297	Annual	UNAM	UNAM
	Graduation numbers	104	110	116	122	129	136	Annual	UNAM	UNAM
	Average length of candidature									
	2. *Education*									
	Enrolment	900	945	993	1043	1096	1151	Annual	UNAM	UNAM
	Graduation numbers	222	234	246	259	272	286	Annual	UNAM	UNAM
	Average length of candidature									
	3. *Science*									
	Enrolment	783	823	865	909	955	1003	Annual	UNAM	UNAM
	Graduation numbers	76	80	84	89	94	99	Annual	UNAM	UNAM
	Average length of candidature									
	4. Economics & Management Sciences									
	Enrolment	1566	1645	1728	1815	1906	2002	Annual	UNAM	UNAM
	Graduation numbers	263	277	291	306	322	339	Annual	UNAM	UNAM
	Average length of candidature									

Note: Average length of candidature currently being calculated

4 (b) Polytechnic of Namibia

		Baseline						*Data Collection and Reporting*		
Indicator	*Level*	*2005*	**Yr 1 2007**	**Yr 2 2008**	**2Yr 3 2009**	**Yr 4 2010**	**Yr 5 2011**	**Frequency of reporting**	**Data Source**	**Responsibility**
	Pre entry enrolment	125	150	150	120	120	120	Annual	PoN	PoN
	Total General Enrolment	6079	7000	7200	7500	7800	8000	Annual	PoN	PoN
	Total General Graduation	1149	1400	1620	1687	1950	2000	Annual	PoN	PoN
	Priority disciplines:									
	1. ***Engineering (Four Programmes)***									
	Enrolment	348	350	350	350	350	350	Annual	PoN	PoN
	Graduation numbers	135	140	140	140	140	140	Annual	PoN	PoN
	Average length of candidature	Note: Average length of candidature currently being calculated								
	2. ***Information Technology (Three Programmes)***									
	Enrolment	469	550	550	550	550	550	Annual	PoN	PoN
	Graduation numbers	49	68	82	82	96	96	Annual	PoN	PoN
	Average length of candidature									
	3. ***Accounting and Finance***									
	Enrolment	1076	1100	1150	1200	1250	1300	Annual	PoN	PoN
	Graduation numbers	257	275	287	300	312	325	Annual	PoN	PoN
	Average length of candidature									
	4. ***Travel and Tourism***									
	Enrolment	101	120	120	120	120	120	Annual	PoN	PoN
	Graduation numbers	31	40	40	40	40	40	Annual	PoN	PoN
	Average length of candidature									
	5. ***Land Management***									
	Enrolment	251	300	350	350	350	350	Annual	PoN	PoN

	Graduation numbers	78	90	95	95	95	95	Annual	PoN	PoN
	Average length of candidature									
	*6. **Agriculture***									
	Enrolment	156	160	160	160	160	160	Annual	PoN	PoN
	Graduation numbers	16	16	19	19	22	22	Annual	PoN	PoN
	Average length of candidature									

EXPLANATORY NOTES:

1. The Polytechnic has reached full capacity for face-to-face teaching and learning in 2006 at 7000 students. The institution is currently constructing a new teaching facility that will be dedicated to a new technological programme to be offered in 2008/9. Unless government funding is increased the institution can not envisage a growth in student numbers.
2. The graduation statistics given here include all qualifications in a programme issued in a certain year. The Polytechnic offers multiple qualifications within a programme on the basis of career structures that exist in industry. Students often leave with the intermediate qualifications to fill real positions in industry, either continuing their study part-time or returning to complete the programme at a later stage.
3. Data is reported annually and all data is sourced from the Integrated Tertiary Software Database run by the Polytechnic. The Bureau of Computer Services is the unit responsible for reporting data inside the institution.
4. The Polytechnic has a foundation programme in Science and Technology that is specifically targeted at enabling entry into the Engineering and Information Technology programmes. The Polytechnic foresees that enrolment in this programme will decline as the number of qualifying graduates from the schools increase.

4 (c). Colleges of Education

		Baseline						*Data Collection and Reporting*		
Indicator	*Level*	*2005*	**Yr 1 2007**	**Yr 2 2008**	**2Yr 3 2009**	**Yr 4 2010**	**Yr 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
	Total General Enrolment	2293	2298	2299	2299	2570	2590	Annual	DHE	DHE
	Total General Graduation	688	692	694	698	699	750	Annual	DHE	DHE
	Priority disciplines:									
	1. ***Mathematics***									
	Enrolment	137	149	152	157	170	174	Annual	DHE	DHE
	Graduation numbers	129	142	148	152	165	168	Annual	DHE	DHE
	Average length of candidature	3								
	2. ***Science***									
	Enrolment	146	148	168	169	189	188	Annual	DHE	DHE
	Graduation numbers	142	146	160	166	186	186	Annual	DHE	DHE
	Average length of candidature	3								
	3. English									
	Enrolment	168	169	172	184	212	216	Annual	DHE	DHE
	Graduation numbers	152	154	164	173	208	212	Annual	DHE	DHE
	Average length of candidature	3								

Mathematics and Science graduates

- 83 teachers graduated from Zimbabwe 2006
- 130 teachers will graduate from Zimbabwe in 2007
- A threshold of 600 graduates is targeted by the programme that will come to an end in 2010.

5. Knowledge Creation and Innovation

			Target Values					Data Collection and Reporting		
Indicator *Level*		*Baseline*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Freq. of Reporting**	**Data Source**	**Responsibility**
Publications in priority disciplines (engineering and other science and mathematics-based programmes)										
	Publications in Refereed Journals	*80/annum**	5% annual increase	5% annual increase	8% annual increase	10% annual increase	15% annual increase	Annual	Institute for Scientific Information Records	DRST, UNAM, PoN
Coordination and improvement of research										
	NCRST: Number or scientific councils established/registered with NCRST and operational	*0***	0	2	4	5	6		DRST	DRST
	NRSTF: Number of research projects/activities funded	3***	5	5	10	20	20		DRST	DRST
NKIS Stakeholder Survey****										
	Adequacy of institutional and organisational arrangements for the proper functioning of the NKIS	*N/A*			10% satisfied	20% satisfied	50% satisfied	Annual	Survey of NKIS Stakeholders	NCRST, CIET.

Note: *Source: Paper published by Shaun Nicholson, Advisor to Directorate of Research, Science and Technology, 2001
**Councils like Medical Council and Engineering Council exists but have to be registered with NCRST for national coordination, new councils for other areas need to be established
***The Directorate of Research, Science and Technology is currently funding a small number of research projects per annum
****Detailed survey elements to be discussed pending the establishment of the NCRST and CIET. Values indicate percentage of participants satisfied

6 (a). Information, Adult and Lifelong Learning: Review and strengthen the policy and legal framework

		Target Values					*Data Collection and Reporting*		
Indicator	*Target*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 20010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Policy and Legal framework for lifelong learning and information service sector revised and strengthened	Clear and articulated policy and legal framework to enable further developme nt	Baseline data	Revised NAMCOL funding formula Evaluation of the National Literacy Programme Information service sector assessment study Records Management Policy	Life Long Learning Policy Revised National Literacy Programme policy Revised Archives Policy	Revised Library & Information Sector policy Revised Archives Bill	Revised Library and Information Service Bill	Annual	NLAS and DAE	NLAS and DAE

6(b). Information, Adult and Lifelong Learning: APL Enrolment

Indicator		*Baseline*	*Target Values*					*Data Collection and Reporting*		
	Regions	**No. tested in 2005**	**Year 1 J 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
	Caprivi	**S1-370** **S2-363** **S3-362**	S1-+1.5% S2-+1.7% S3-+2.0%	S1-+2.0% S2-+2.2% S3-+2.5%	S1-+2.5% S2-+2.7% S3-+3.0%	S1-+2.7% S2-+3.0% S3-+3.3%	S1-+3.0% S2-+3.5% S3-+3.8%	Annual		
	Erongo	**S1-55** **S2-102** **S3-207**	S1-+1.5% S2-+1.7% S3-+2.0%	S1-+2.0% S2-+2.2% S3-+2.5%	S1-+2.5% S2-+2.7% S3-+3.0%	S1-+2.8% S2-+3.0% S3-+3.3%	S1-+3.1% S2-+3.5% S3-+3.8%	Annual		
Number of learners	*Hardap*	**S1-87** **S2-57**	S1-+1.5% S2-+1.7%	S1-+2.0% S2-+2.2%	S1-+2.5% S2-+2.7%	S1-+2.7% S2-+3.0%	S1-+3.3% S2-+3.5%	Annual	NLPN	

taking part		**S3-155**	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
in the	*Karas*	**S1-62**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.7%	S1-+3.0%			
National		**S2-82**	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual	Education	
Literacy		**S3-160**	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%		Management	Ministry of
Programme	*Khomas*	**S1-149**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.8%	S1-+3.2%		Information	Education
		S2-181	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual	System (EMIS)	
		S3-770	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%		2003	
	Kunene	**S1-447**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.9%	S1-+3.5%			
		S2426	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-229	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Ohangwena	**S1-839**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.9%	S1-+3.5%			
		S2-1124	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-840	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Kavango	**S1-1241**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.9%	S1-+3.5%			
		S2-1148	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-854	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Omaheke	**S1-354**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.8%	S1-+3.2%			
		S2-333	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-165	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Omusati	**S1-374**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.8%	S1-+3.2%			
		S2-829	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-501	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Oshana	**S1-64**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.9%	S1-+3.5%			
		S2-334	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-230	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Oshikoto	**S1-350**	S1-+2.5%	S1-+2.7%	S1-+3.0%	S1-+3.5%	S1-+3.8%			
		S2-350	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-693	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	Otjozondjupa	**S1-475**	S1-+1.5%	S1-+2.0%	S1-+2.5%	S1-+2.6%	S1-+2.8%			
		S2-322	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-328	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			
	National	**S1-4867**	S1-+2.5%	S1-+2.7%	S1-+3.0%	S1-+3.5%	S1-+3.8%			
		S2-5651	S2-+1.7%	S2-+2.2%	S2-+2.7%	S2-+3.0%	S2-+3.5%	Annual		
		S3-5494	S3-+2.0%	S3-+2.5%	S3-+3.0%	S3-+3.3%	S3-+3.8%			

^2005 Data - Breakdown by gender and pass rate also available

6(b). Literacy

		Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*Level*	*2005*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
% youths (15-24 year old) that are literate										
	National Average	88.3%	90%	92%	94%	96%	97%	Annual	NPC/ EMIS/DAE	MoE
% adults (15+ year olds) that are literate										
	National Average	84%	85.5%	87%	88.5%	89%	90.5%	Annual	NPC/ EMIS/DAE	MoE
Literacy disparity - gender parity index (M:F)										
	National Average	84/83	85/84	86/85	87/86	88/87	89/88	Annual	NPC/ EMIS/DAE	MoE

6 (d). Number of schools that have family literacy programmes in place

		Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*Level*	*2005*	**Year 1 2007**	**Year 2 20078**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Number of schools with family literacy program mes	Number of schools per region (13 regions)	1	5	7	9	11	13	Annual	DAE	DAE

6 (e). Number of educational radio programmes broadcast

		Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*Level*	*2006*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Educational programmes produced and broadcasted	Number of programmes per year	Radio recording studio		60	90	120	150	Annual	NAMCOL	NAMCOL

6 (f). Public ICT access through the library and CLDC network

Percentage of National / Public / Community libraries and CLDCs providing public ICT access including internet connectivity

Total number of libraries/CLDCs in 2006 is 61 and the rate of expansion has been calculated as 1 library/CLDC per year

		Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*Level*	*2006*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Countrywide public ICT access point network	% of libraries/ CLDCs providing ICT access	11 %	11 %	25 %	40 %	61 %	66 %	Annual	NLAS and DAE	NLAS

6 (g). Adequate and well resourced regional research and study libraries serving learners, students, planners and other community members and contributing to better educational outcomes

		Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*Target*	*2006*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Regions providing adequate regional resource and study centre facilities	13 regions	Khomas			Caprivi	Omusati	Oshana Ohangwena Omaheke	Annual	NLAS	NLAS

7. Information and Communication Technology in Education

	Baseline	*Targets*					*Data Collection and Reporting*		
Indicator	*2005*	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Deploy a minimum of 3 computer labs to each of the four Colleges of Education									
	*Unknown	12	12	6	TBA	TBA	Annual	NETSS EMIS	ICT PMO
Develop a cost sharing mechanism and deploy laptop computers to all Educators / Lecturers at the Colleges of Education									
	172	40%	40%	20%	TBA	TBA	Annual	NETSS/CoE	ICT PMO
At 33 TRCs, at least 1 room with ICTs is available; a projector and/or ability to display audiovisual materials is available; and Internet connectivity is available									
	33	4	13	10	9	TBA	Annual	NETSS/TRC	ICT PMO
Unit standards, curriculum and training materials are available for localised Foundation Level ICT Literacy and training implemented in Educational Institutions									
Number of Schools CoE/UNAM TRC	*Unknown	 40 4 4	 150 4 13	 150 10	 150 9	 150 TBA	Annual	NIED CoE TRC	ICT PMO
All in-service teachers in all 532 schools with secondary grades received training at least Foundation Level ICT Literacy certificate and completes the ICT Integration for Educators module									
Number of Teachers	5 500	200	750	1 000	1250	2 000	Annual	NIED Certification by trainers	NIED CoE UNAM
An aggregate of 1 computer lab is deployed to the following educational institutions with a minimum of 15 computers. All schools with secondary grades will have at least 1 room with ICTs, a projector and/or ability to display audiovisual materials and Internet connectivity.									
Number of Schools CoE/UNAM TRC VTC/COSDEC Libraries	*Unknown	 40 4 4 3 4	 150 4 13 7/2 10	 150 10 10 7/3 10	 150 10 9 7/3 10	 150 TBA 0/5 10	Annual	NIED CoE TRC	NETSS NIED ICT PMO

8. HIV/Aids

	Baseline	*Target Values*					*Data Collection and Reporting*		
Indicator	*2006*[8]	**Year 1 2007**	**Year 2 2008**	**Year 3 2009**	**Year 4 2010**	**Year 5 2011**	**Frequency of Reporting**	**Data Source**	**Responsibility**
Number of learners exposed to LSE									
	Not available *	60%	70%	80%	90%	95%	Annually	HAMU Monitoring Report	HAMU
Number of OVCs receiving nutritional support									
	109809	120 000 (35% of all learners)	130 000	140 000	150 000	160 000	Annually	HAMU Monitoring Report	HAMU
Number of OVCs receiving psychosocial support									
	14666	160 00 (3% of all learners)	18 000	20 000	25 000	25 000	Annually	HAMU Monitoring Report	HAMU

* For the number of learners exposed to life skills education no numbers were available. The targets given for 2007 – 2011 are based on the estimates given by the Unicef annual work plan for 2007. They are related to the programmes *My Future is My Choice* and *Window of Hope*. The number that corresponds to 100% of the learners will be taken from the EMIS reports of the respective years.

[8] Most recent monthly data (unaudited)

Third National Development Plan (NDP3) Goals 2007 - 2012
Key Results Area 3: Productive and Competitive Human Resources and Institutions

Goal	Performance Indicator	Sub-sector
Adequate supply of qualified, productive, and competitive labor force	a. Proportion (%) of children attending early childhood development programme	Education All
	b.Net enrolment rate of children in: i) primary education ii) secondary education	
	c. Gross enrolment rate for children in: i) primary education ii)secondary education	
	d. Completion rate: i) Primary education ii) Secondary education iii)Tertiary education iv)Vocational	
	e. Literacy rate (by category/ segments of society)	
	f. Proportion (%) of graduates employed/ absorbed into labour market (within specific time periods)	
	g. Percentage of labour market requirements met (by category)	
	h. Labour Productivity Index (by sector/category)	
	i. (i) Competitiveness Index (by category/ sector) (ii)Competitiveness Index (international)	
	j. Number/proportion of institutions of excellence in sectors of comparative advantage (internationally rated by International Industry Excellence Rating) (by category)	
	k. Average score on institutions by International Industry Excellence Rating (by category)	
	l. Percentage of GDP utilized for Human Resource Development (HRD)	
	l. Percentage of Sub-Sector Budget utilised for HRD	

Second National Development Plan Sector Indicators

NDP2 Sector Indicator	Baseline		Target	
	Year	Data	Year	Target
Net enrolment of 7 to 13 year old	2005	92%	2006	93%
Survival rate from Primary to Secondary	2005	77%	2006	70%
Transition rate from Primary to Secondary	2005	78.1%	2006	75%
Survival rate for Junior Secondary Level	2005	62.3%	2006	50%
Adult literacy rate	2005	83.9%	2006	85%
Graded Entries of full-time JSC candidates	2005	92.6%	2006	90%
Percentage Graded Entries of full-time JSC candidates obtaining 27+	2005	26.7%	2006	30%
Percentage of Graded subject entries of full-time IGCSE candidates	2005	92.2%	2006	92%
Percentage of schools offering complete phases	2005	82.0%	2006	95%
Schools with functioning libraries	2005	386	2006	450
Schools with functioning computer rooms	2005	n/a	2006	400
Secondary schools per region - Arts	2005	n/a	2006	1
National Arts School Established	2005	n/a	2006	1
Permanent Classrooms constructed at existing Schools	2005	2407	2006	2000
Laboratories constructed at schools with secondary grades	2005	452	2006	145
Libraries constructed at schools with secondary grades	2005	200	2006	25
Administrative blocks constructed at schools with enrolment bigger than 249	2005	99	2006	250
Teacher accommodation units constructed at rural schools with senior primary or secondary grades	2005	480	2006	200
Schools provided with special education facilities	2005	8	2006	5
New secondary schools constructed	2005	10	2006	7
Schools provided with electricity	2005	825	2006	300

**Note that the targets herein were set earlier than the ETSIP targets, which explains the differences.
** Use of the indicators are defined next to the specific indicator below.

Looking at the above targets, it seems MoE has outperformed most of the Targets.

ORGANOGRAMME: MINISTRY OF EDUCATION