

Republic of Rwanda



MINISTRY OF EDUCATION

**Education Sector Strategic Plan
2010 – 2015**

July 2010

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Foreword

The publication of the Education Sector Strategic Plan (ESSP) 2010-2015 marks the update of ESSP 2008-2012 and a further step on the road towards developing Rwanda's education sector in line with our Economic Development and Poverty Reduction Strategy (EDPRS). As such, it will inform development of the education sector during the next five years. In addition to the continuing priority of effective nine-year basic education for all our children, this revised plan reflects our new priority of making post-basic education more accessible and more relevant to our national needs.

The concepts of universal equitable access and of quality of provision underpin the ESSP. These will always occupy the most important place in the sector's planning and implementation activities. The ESSP states the key targeted educational outcomes which all levels from Ministry to schools should strive for. This ambitious plan is an instrument to make education sector policies operational and fully incorporates the Government's aims of economic development and reducing poverty based upon the productive application of skills and technology.

This ESSP aims at improving education, particularly skills development, to meet the labour market demand, by increasing the coverage and the quality of nine-year basic education (9YBE) and strengthening post-basic education (PBE), which includes technical and vocational education and training (TVET) and higher education but also general upper secondary education and teacher education. As we consolidate the nine-year basic education programme we shall be able to focus more on the effectiveness of the bridge between basic education and the world of work.

The sector-wide approach (SWAp) continues to guide the ESSP. The ESSP guides the three-year Medium Term Expenditure Framework (MTEF), the Annual Budget and the development of the Annual Operational Work Plans. The ESSP is not 'written in stone', nor is it presented as a blueprint for education sector development; rather it is a flexible strategic guide that will be used as a basis for the development of detailed operational plans indicating what, by whom, and when all activities will be done. The separate National Implementation Framework bridges the gap between this ESSP and the operational plans, especially in relation to decentralised delivery.

This is an important time for education in Rwanda; there are a number of ambitious policies and initiatives leading the way forward. A clear, robust and realistic plan such as this ESSP can lead to increasing Government and development partner resources being channelled to the education sector in order to fill the identified financing gaps, as we saw in 2009 with our successful application for Education for All Fast Track Initiative funding.

I wish to express my gratitude to all the staff of the Ministry of Education, to education staff in the Districts, to the development partners and to all the many other stakeholders who have contributed to the preparation of this plan. I commend the ESSP as the way ahead for education development in Rwanda and urge all stakeholders and partners to use this plan as a first point of reference when considering how we may all support activities in this very significant sector and achieve our goal of equitable access to quality education for all Rwandans.

Dr Charles Murigande
Minister of Education

EDUCATION SECTOR STRATEGIC PLAN 2010– 2015

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Abbreviations

A0, A1, A2	Qualification levels for Post-Basic Education (see section 2.6)
BE	Basic Education
CoE	College of Education
CNLS	National AIDS Control Commission
CNRU	Rwandan National Commission for UNESCO
CPAF	Common Performance Assessment Framework
DHS	Demographic and Health Survey
EAC	East African Community
ECD	Early Childhood Development
EDPRS	Economic Development and Poverty Reduction Strategy
EICV	Household Living Conditions Survey
EMIS	Education Management Information System
ESSP	Education Sector Strategic Plan
ETO	Upper Secondary Technical School (<i>Ecole Technique Officielle</i>)
FBO	Faith-Based Organisation
F	Female
FTI	Fast-Track Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
HE	Higher Education
HEC	National Council for Higher Education
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HLI	Higher Learning Institution
ICT	Information and Communication Technology
IFC	International Finance Corporation (of the World Bank)
IGE	General Inspectorate of Education
INSET	In-Service Education of Teachers
IPRC	Integrated Polytechnic Regional Centre
IRST	Institute of Scientific and Technological Research
ISAE	Higher Institute for Agriculture and Livestock
JRES	Joint Review of the Education Sector
KIE	Kigali Institute of Education
KIST	Kigali Institute of Science and Technology
LMIS	Labour Market Information System
LS	Lower Secondary
LTSFF	Long-Term Strategy and Financing Framework
M	Male
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MIFOTRA	Ministry of Public Service and Labour
MIGEPROF	Ministry of Gender and Family Promotion
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education
MINICOM	Ministry of Commerce
MINISANTE	Ministry of Health
MINIYOUTH	Ministry of Youth
MTEF	Medium Term Expenditure Framework
NCDC	National Curriculum Development Centre

NCSTI	National Council for Science, Technology and Innovation
NGO	Non-Governmental Organisation
NISR	National Institute of Statistics of Rwanda
NUR	National University of Rwanda
ODeL	Open, Distance and e-Learning
OVCs	Orphans and Vulnerable Children
P1, P2 etc	Primary year 1, 2 etc
PBE	Post-Basic Education
PGCE	Postgraduate Certificate in Education
PGDE	Postgraduate Diploma in Education
PTA	Parent-Teacher Association
PTC	Parent-Teacher Committee
QTS	Qualified Teacher Status
REAP	Rwanda English in Action Programme
REB	Rwanda Education Board
RNEC	Rwanda National Examinations Council
S1, S2 etc.	Secondary year 1, 2 etc.
SACCO	Savings and Credit Cooperative
SFAR	Student Financing Agency of Rwanda
SFB	School of Finance and Banking
SNE	Special Needs Education
STI	Science, Technology and Innovation
STR	Science, Technology and Research
SWAp	Sector-Wide Approach
TDM	Teacher Development and Management
TSC	Teacher Service Commission
TTC	Teacher Training College
TVET	Technical and Vocational Education and Training
UP	Umutara Polytechnic
US	Upper Secondary
VUP	Vision 2020 Umurenge Programme
WDA	Workforce Development Authority
9YBE	Nine-year basic education

All data are from MINEDUC statistics (including those of its semi-autonomous agencies such as HEC and WDA) except where otherwise stated.

All costs are in Rwandan Francs (RWF). For international comparisons, RWF 1,000 is approximately USD 1.70 (May 2010).

Summary of Education Sector Priorities for 2010-2015

1. **Improving completion and transition rates whilst reducing drop-out and repetition in basic education** through a range of strategies including expansion of Early Childhood Development (ECD) provision, fast-tracking Nine-Year Basic Education, mainstreaming the child-friendly schools programme, introduction of school health and HIV and AIDS prevention programmes, development of monitoring of learning achievement at school and national level, developing functional literacy and numeracy skills and textbook procurement and management;
2. **Ensuring that educational quality continues to improve** through closer integration of curriculum development, quality assurance and assessment, improved textbook distribution, improving teaching and learning while introducing English as the medium of instruction, setting up a system of monitoring of learning achievement at school and national level, through the Rwanda Education Board, and setting up of national and District level 'Schools/Centres of Excellence';
3. **Developing a skilled and motivated teaching, training and lecturing workforce** through development of a comprehensive teacher development and management system (including an HIV/AIDS in the Workplace policy); an implementation plan for the use of English as the medium of instruction; and measures to improve teacher motivation such as expansion of the Umwalimu SACCO initiative;
4. **Ensuring that the post-basic education (PBE) system is better tailored to meet labour market needs** through encouraging greater private enterprise involvement in PBE, including upper secondary and teacher education, expansion and strengthening of TVET, expansion of a sustainable student loans system targeting disadvantaged students enrolled in priority studies for achieving Vision 2020 goals and improved student grants recovery and introduction of open, distance and e-learning and regional harmonisation with the East African Community (EAC);
5. **Ensuring equity within all fields and throughout all levels of education and training** through specific interventions to raise performance of girls and learners with special needs, including orphans and vulnerable children, and improving provision for adult literacy skills development;
6. **Strengthening education in science and technology** through specific interventions to address the under-developed skills in all areas of science and technology and the limited resources in teaching institutions to support the teaching of quality science and technology education; and integrating ICT within all subject areas;
7. **Strengthening the institutional framework and management capacity for effective delivery of education services at all levels** through leveraging resources to address the funding gap; specific interventions to raise capacities to mount reforms and engage in monitoring and evaluation of the sector; improved use of information systems such as the Education Management Information System (EMIS) and the Labour Market Information System (LMIS) from the school to national level; improved accountability, monitoring and evaluation through School Boards and PTAs; and comprehensive training in whole school management and development.

Chapter 1: An Overview of the Education Sector

This Education Sector Strategic Plan (ESSP) is the foundation for education sector planning for the next five years. **Chapter 1** provides the sector goal, purpose and high level objectives. **Chapter 2** shows the governance and structure of the education sector. **Chapter 3** outlines the major strategic priorities for the sector and **Chapter 4** sets out the strategies in the form of a logical framework showing outputs and targets. **Chapter 5** provides the financing framework. **Chapter 6** explains the management, monitoring and review arrangements.

1.1 Education sector mission, goal and objectives

This five-year Education Sector Strategic Plan is a further step in the Government's implementation of its Education Sector Policy. The ESSP reflects the mission statement for the Ministry of Education and incorporates the national and international aspirations which are to underpin education sector development:

The mission of the Ministry of Education is to transform the Rwandan citizen into skilled human capital for socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking and positive values.

This ESSP is aligned with the Economic Development and Poverty Reduction Strategy (EDPRS). The EDPRS logical framework clearly sets out the purpose of the education sector in relation to the Government's overall goal for the EDPRS.

The Overall Goal of the EDPRS is to: *Achieve sustainable economic growth and social development*

The Purpose of the Education Sector is: *Access to quality, equitable and effective education for all Rwandans*

The EDPRS high level objectives for education are to improve and increase:

1. Access to education for all
2. Quality education at all levels
3. Equity in education at all levels
4. Effective and efficient education system
5. Science and technology and ICT in education
6. Promotion of positive values, critical thinking, Rwandan culture, peace, unity and reconciliation

These high level objectives are to apply to all levels of education and cross-cutting issues:

- Basic education (pre-primary, primary, lower secondary and adult literacy)
- Post-basic education (upper secondary, teacher education, TVET and higher education)

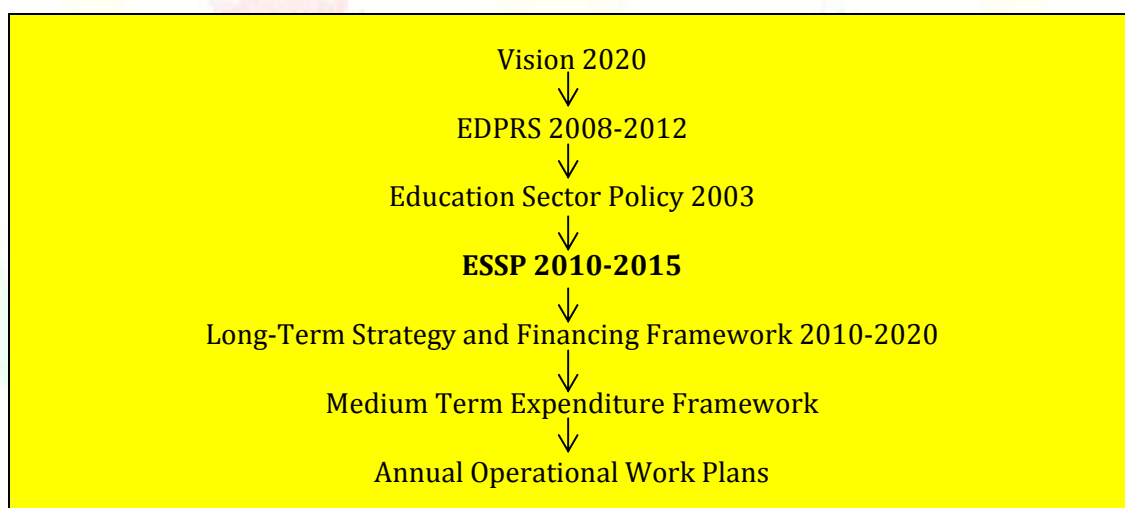
- Science, technology and ICT in education
- Girls' education
- Special needs education
- School health including HIV and AIDS prevention and sports
- Education for children affected by emergencies.

The strategies for these areas are outlined in the following chapters.

1.2 National policy and international goals

The ESSP is guided by the Education Sector Policy¹. It reflects the Government's Vision 2020 and its Economic Development and Poverty Reduction Strategy (EDPRS) 2008-2012 which recognises the key role that education can play to improve social and economic well-being and reduce poverty.

The policies for the education sector comply with major international goals and national aspirations. The ESSP is consistent with the United Nations' 2000 Millennium Declaration and the Millennium Development Goals (MDGs), particularly those that highlight the importance of universal primary education and the removal of gender disparities. The Education for All commitment (Dakar 2000) is also reflected in the Strategic Plan. The following diagram summarises the relationship between the sector planning documents.



1.3 Impact of education on economic development, poverty reduction and social cohesion

The Government's Vision 2020 and EDPRS set out ambitious plans to create a growing knowledge economy based on a skilled workforce that can compete in the region and the wider international arena. Only a workforce with a sufficient number of people with the necessary skills to operate in an increasingly sophisticated and continuously adapting business environment will allow Rwanda to become the competitive and diversified economy it aspires to be. The Nine-Year Basic Education programme is the foundation for human resource development, while improved access to and quality of upper secondary schools, teacher training colleges, Technical and Vocational Education and Training (TVET) institutions and Higher Learning Institutions will supply the demand for higher level skills and competencies. There is

¹ The 2003 Education Sector Policy will be reviewed and updated in 2010.

also convincing evidence, derived from World Bank studies, that additional years of secondary education can increase private household earnings through formal or informal employment.

The curriculum at all levels is being revised to reflect the growing demand for ICT knowledge and applications, entrepreneurship, science and technology, and environmental management. The increase in tourism, agro-industry and infrastructure development as well as in other areas that are emphasised in the EDPRS, such as coffee and tea production, mining, financial services, transport and logistics, requires skills in fields such as hospitality and agriculture in addition to the traditional skill areas of electronics, mechanics, construction and handicrafts. The Government's 2009 National Skills Audit also emphasised the need for better quality training of health and education professionals. Finally, the education system provides one of the main foundations for life skills, including critical thinking and Rwandan cultural values, to face the challenges of health and nutrition, HIV/AIDS, family planning, gender awareness, social inclusion and the promotion of peace, unity and reconciliation.

Economic returns from education

Because higher education levels are associated with higher earnings, an increased skills level of the population is expected to contribute not only to economic growth but also to poverty reduction. Findings from a World Bank study in Rwanda showed that in 2006 average earnings of primary school completers were 70% higher than those of citizens without any education. Average earnings of citizens who completed lower secondary, general upper secondary or university were respectively 2.4, 4.4 and 16 times higher

1.4 Purpose of the Education Sector Strategic Plan

This Education Sector Strategic Plan (2010-2015) provides the overarching framework for a holistic sector-wide approach to the development and delivery of education services in Rwanda. It covers both basic education (pre-primary, primary, lower secondary and adult literacy) and post-basic education (upper secondary, teacher education, TVET and higher education). The Medium Term Expenditure Framework (MTEF) is used as a tool to ensure that budget allocations follow medium and long-term paths and there is consistency between the ESSP and MTEF. The use of the MTEF also ensures that educational proposals are set within the national fiscal planning and management process, with close monitoring and regular evaluation. Annual costed operational plans and activities linked to the budget are developed from the ESSP.

However, not only is the plan a key tool for domestic investment, it is a major instrument for leveraging additional resources from both private sector and bilateral/multilateral development partners. Partnerships between Government, parents, communities, donors, the private sector, NGOs, faith-based organisations and civil society generally are important. An effective donor coordination structure supported by a Memorandum of Understanding based on the previous Sector Plans, signed by most major partners and Government, already exists. Annual participatory consultations take place between all partners at the Joint Reviews of the Education Sector. These feed into the Joint Sector Budget Reviews and the Common Performance Assessment Framework managed by the Ministry of Finance and Economic Planning. At these reviews evaluation of key performance indicators and expenditure performance takes place as well as forward looking discussions on policy issues and implementation.

1.5 Sources

In addition to the overarching Government documents, Vision 2020 and EDPRS, and the Education Sector Policy, the ESSP reflects a number of key sub-sector and cross-cutting policy

and guidance documents which have been developed (and in most cases approved by Cabinet) including:

Girls' Education Policy (2008)
Higher Education Policy (2008)
Quality Standards in Education (2008)
Science, Technology and Innovation Policy (2006)
Special Needs Education Policy (2007)
Teacher Development and Management Policy (2007)
Technical and Vocational Education and Training (TVET) Policy (2008)

Costed strategies have been approved for a number of the above mentioned policies and several more are in draft.

This ESSP also reflects the Nine-Year Basic Education Strategy, the draft Strategic Plan for Technical Education 2008-2012, the draft Higher Education Strategic Plan (2009), the Concept Paper on the Development and Implementation of an Integrated TVET System (2008) and the Issues Paper on Reform of Post-Basic Education (2008). A number of additional studies and analyses have also been used in developing the Plan. In general the source of the quantitative data is MINEDUC statistics.

The ESSP 2010-2015 has been developed in consultation with a wide range of stakeholders and following an extensive review of previous ESSPs. Following an internal MINEDUC retreat to map out the plan, MINEDUC undertook a series of consultations with the Districts, schools and post-basic institutions, NGOs and faith-based organisations, the private sector, development partners and with other Government departments.

New policies

Further policies which are being developed and which will be finalised as part of this ESSP include: *Adult Literacy, Early Childhood Development, Education Infrastructures, HIV/AIDS in the Workplace, ICT in Education, School Health* and

1.6 Progress since the 2006-2010 Education Sector Strategic Plan

Access and retention: Enrolment has significantly increased since 2000 with basic Gross Enrolment Rate (GER) reaching its peak at 152% in 2007 and net enrolment rate 96% in 2007. In 2008, the GER dipped to 127.9% reflecting an improvement in the school-age enrolment pattern, and the net enrolment dropped to 94%. Girls' gross enrolment rate in 2008 (128.5%, representing 52% of total enrolment) is higher than boys'. Completion rates have been improving steadily since 2000 and since 2008 when the average was 53% they have increased considerably to an average of 75% with completion rates for girls at 78%. Primary drop-out rates have been falling slowly from 16.6% in 2001 to 15.2% in 2009 and repetition rates from 21% in 2002 to 15.3% in 2009. The main reason for this sharp increase in completion and improvements in transition to Grade 7 has been the fast-tracking of the Nine-Year Basic Education strategy including the construction of over 3,000 classrooms and latrines in five months.

Quality: The Government has addressed the challenges of improving quality despite the financial limitations in recruiting more teachers onto the payroll and improving salaries. In 2009, the Ministry of Education initiated an acceleration of the Nine-Year Basic Education policy aimed at reducing class sizes, through better planned double-shifting, improving specialisation of primary teachers, and reducing core subjects from nine to five in Grades 1-3, and from 11 to six subjects in Grades 4 to 6, in order to increase the number of hours taught per subject. Capitation grants have been used by schools to hire an additional 1,968 contract teachers and to

pay bonuses, helping to reduce the pupil:teacher ratio from 74:1 to 65:1. A major reform of textbook policy is underway with decentralised procurement and school-level selection being rolled out over the next two years. Training of school heads and school management teams has been rolled out for both primary and secondary schools. A girls' education policy has been endorsed and the implementation strategy is under development. The key elements of the 'child-friendly school' approach, which has been piloted successfully in 54 schools, is being scaled up countrywide, to improve the overall school learning environment.

Financing: The years 2006 to 2009 saw a sharp increase in domestic and external financing with sector budget support and the FTI Catalytic Funds contributing to increased resources for teacher training, infrastructure, and capitation grants to support the removal of user fees for the whole of Nine-Year basic education. The Government has been able to raise the annual capitation grant to RWF 3,500 per child at primary level and RWF 7,000 per child at lower secondary level and this rise in capitation grants for primary and lower secondary has made an impact on both access and quality.

Management: Public service reform resulted in insufficient capacity in the Ministry of Education in key areas such as planning, finance, statistics and teacher management. However, Government restructuring is addressing some of these gaps, and the development of a Teacher Service Commission is targeting teacher management concerns. A new Rwanda Education Board structure made up of mostly semi-autonomous agencies such as National Curriculum Development Centre, National Examinations Council and Inspectorate will also support core MINEDUC functions. At decentralised levels recruitment and training of more qualified district education officers has been undertaken, while there has been comprehensive school management training undertaken of school heads, deputies and bursars. An innovative Capacity Building Fund is enabling MINEDUC to contract in support staff, consultants and training and mentoring for priority areas based on a rolling two year Institutional Development and Change Management Plan.

1.7 Main priorities for the education sector for 2010-2015

Significant progress has been made with regard to access to education, particularly at the basic level, through fee-free Nine-Year Basic Education. The major challenges for this ESSP period will be ensuring quality and equity in education and training throughout the system from early childhood development to higher education and ensuring that teachers and learners will become fully proficient in English. Therefore the main priorities, as reflected in the logframe in Chapter 4, will be:

1. **Improving completion and transition rates whilst reducing drop-out and repetition in basic education** through a range of strategies including expansion of Early Childhood Development (ECD) provision, fast-tracking Nine-Year Basic Education, mainstreaming the child-friendly schools programme, introduction of school health and HIV and AIDS prevention programmes, development of monitoring of learning achievement at school and national level, developing functional literacy and numeracy skills and textbook procurement and management;
2. **Ensuring that educational quality continues to improve** through closer integration of curriculum development, quality assurance and assessment, improved textbook distribution, improving teaching and learning while introducing English as the medium of instruction, setting up a system of monitoring of learning achievement at school and national level through the Rwanda Education Board, and setting up of national and District level 'Schools/Centres of Excellence';

3. **Developing a skilled and motivated teaching, training and lecturing workforce** through development of a comprehensive teacher development and management system (including an HIV/AIDS in the Workplace policy); an implementation plan for the use of English as the medium of instruction; and measures to improve teacher motivation such as expansion of the Umwalimu SACCO initiative;
4. **Ensuring that the post-basic education (PBE) system is better tailored to meet labour market needs** through encouraging greater private enterprise involvement in PBE, including upper secondary and teacher education, expansion and strengthening of TVET, expansion of a sustainable student loans system targeting disadvantaged students enrolled in priority studies for achieving Vision 2020 goals and improved student grants recovery, introduction of open, distance and e-learning and regional harmonisation with the East African Community (EAC);
5. **Ensuring equity within all fields and throughout all levels of education and training** through specific interventions to raise performance of girls and learners with special needs, including orphans and vulnerable children, and improving provision for adult literacy skills development;
6. **Strengthening education in science and technology** through specific interventions to address the under-developed skills in all areas of science and technology and the limited resources in teaching institutions to support the teaching of quality science and technology education; and integrating ICT within all subject areas;
7. **Strengthening the institutional framework and management capacity for effective delivery of education services at all levels** through leveraging resources to address the funding gap; specific interventions to raise capacities to mount reforms and engage in monitoring and evaluation of the sector; improved use of information systems such as the Education Management Information System (EMIS) and the Labour Market Information System (LMIS) from the school to national level; improved accountability, monitoring and evaluation through School Boards and PTAs; and comprehensive training in whole school management and development.



MINEDUC's
offices in Kigali

Chapter 2: Governance and Structure of the Education Sector

2.1 Central Government

The education sector comprises those educational activities that take place currently under the governance of five ministries. Of these, MINEDUC has the major responsibility and has been designated in the national Economic Development and Poverty Reduction Strategy (EDPRS) as the lead Ministry for the education sector with responsibility for policy formulation and monitoring and evaluation.

The other four Ministries which have significant involvement in education provision and development are:

Ministry of Local Government (MINALOC) which oversees decentralisation functions of education; administers the Assistance Fund for Genocide Survivors (FARG) and community development funds; monitors performance at decentralised levels (provinces and districts, including performance contracts) and manages the Vision 2020 Umurenge social protection programme (VUP) which impacts on education as well as health.

Ministry of Public Service and Labour (MIFOTRA) which sets and administers salary levels and conditions of service for all civil servants. However, during the period of this ESSP the Rwanda Education Board (see section 2.3) will take over responsibility for conditions of service for teachers.

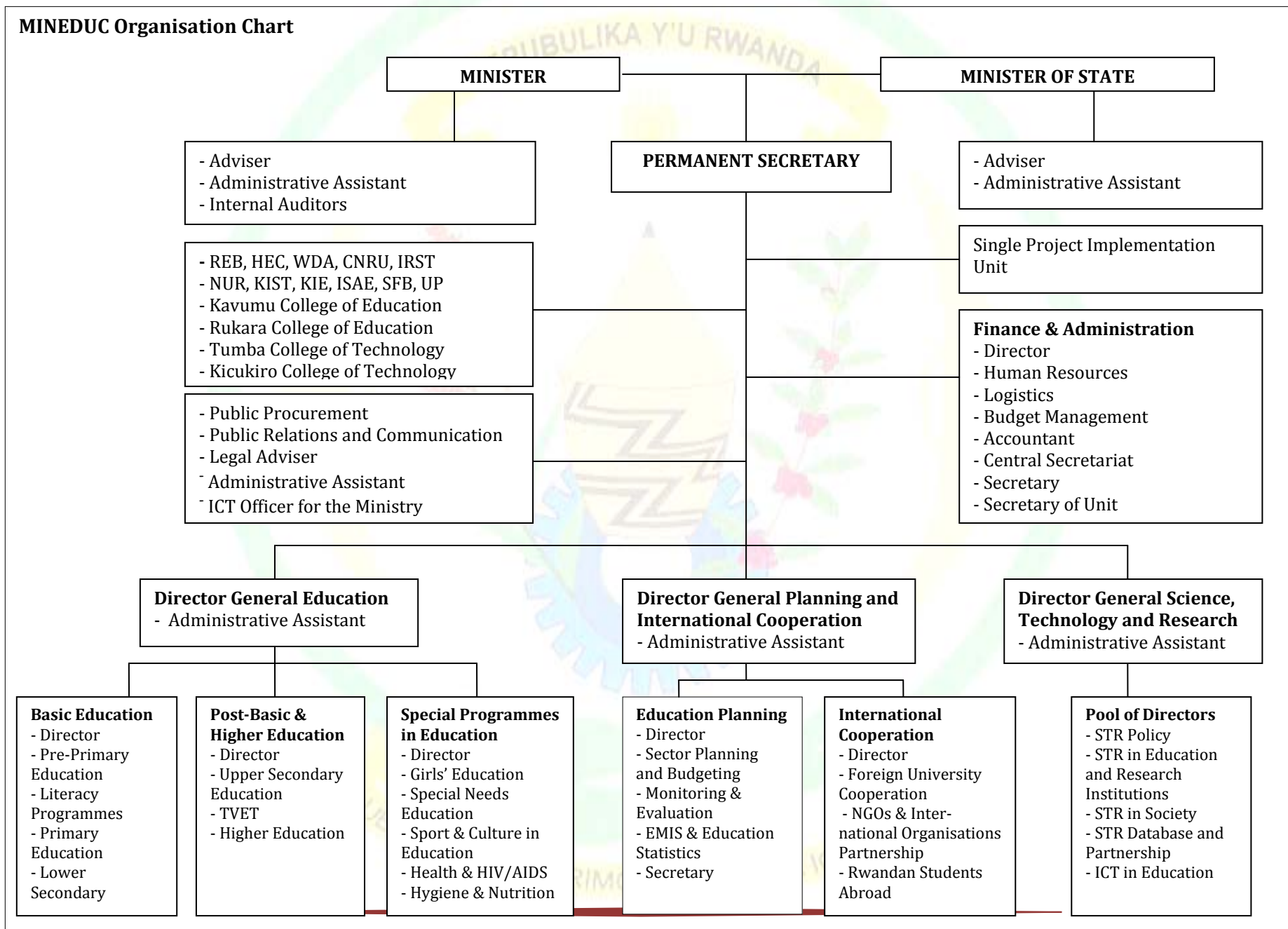
Ministry of Finance and Economic Planning (MINECOFIN) which sets broad policy and planning frameworks, oversees financial planning, the Medium Term Expenditure Framework (MTEF), the EDPRS and the Long-Term Investment Framework. It plays an important role in the performance assessment and monitoring of budget execution as well as in the processing of the Education for All Fast Track Initiative (FTI) Catalytic Fund Grant.

Ministry of Health (MINISANTE) which has responsibility for all the educational institutions training health professionals. It also contributes through various educational programmes related to issues such as health, nutrition and HIV/AIDS prevention.

There are other Ministries that are involved in education such as the Ministry of Youth (MINIYOUTH) and the Ministry of Gender and Family Promotion (MIGEPROF).

2.2 Ministry of Education

The Ministry of Education sets policy, norms and standards for the education sector and undertakes planning, monitoring and evaluation at the national level. The following diagram shows the current MINEDUC organisation chart, which illustrates the range of responsibilities.



2.3 Semi-autonomous agencies

These are public institutions established by Acts of Parliament. They are affiliated to the Ministry of Education with administrative and financial autonomy. These institutions include the Rwanda Education Board (REB), National Council for Higher Education (HEC) and National Council for Science, Technology and Innovation (NCSTI), Workforce Development Authority (WDA), Rwandan National Commission for UNESCO (CNRU), Institute of Scientific and Technological Research (IRST) and public Higher Learning Institutions (HLIs). All these institutions have particular mandates to implement specific education policies which are designed at Ministry level.

2.3.1 Rwanda Education Board

In 2009, the Government proposed to the Parliament a bill establishing the Rwanda Education Board (REB) under the supervision of MINEDUC with the aim of providing a quality education to all Rwandans. REB will bring together the main implementation bodies to ensure more effective coordination and more streamlined management.

The REB's key responsibilities are contributing to education policy development and coordinating and fast-tracking implementation of education activities in the following areas:

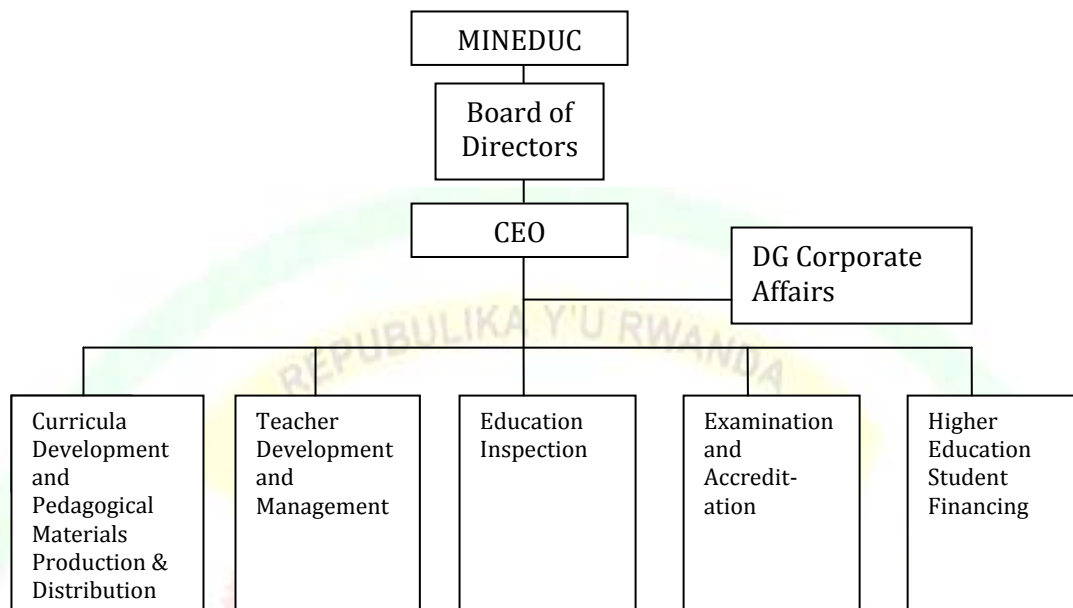
Performance Contracts

MINEDUC and the Board of Directors of REB are required to conclude a performance contract detailing the responsibilities of the Board of Directors and the expected results of REB, and the CEO of REB is required to conclude similar performance contracts with other members of staff of REB.

- (1) **Curricula and pedagogical materials development, production and distribution**, taking over the responsibilities of the National Curriculum Development Centre (NCDC) for all levels of education except TVET and higher education.
- (2) **Teacher development and management**, taking over the responsibilities of the Teacher Service Commission Task Force, including programmes aimed at improving the welfare of teachers at all levels of education except TVET and higher education and establishing conditions of service and guiding appointments, career development, evaluation, promotion and transfer of teachers except those in TVET and higher education.
- (3) **Education inspection**, with responsibility for setting and monitoring educational standards at all levels except TVET and higher education, and taking over the responsibilities of the General Inspectorate of Education.
- (4) **Examinations and accreditation**, responsible for national examinations at all levels of education except TVET and higher education, and taking over the responsibilities of the Rwanda National Examinations Council.
- (5) **Higher education student financing**, responsible for modalities of selecting students receiving loans for higher education and taking over the responsibilities of the Student Financing Agency of Rwanda.

REB is managed by a Chief Executive Officer (CEO) reporting to a Board of Directors. The CEO chairs a Management Committee which comprises five Deputy CEOs responsible for each of the policy areas set out above, and the Director General of Corporate Affairs. The following diagram illustrates the REB organisation chart.

Rwanda Education Board



2.3.2 Other semi-autonomous agencies

The **National Council for Higher Education (HEC)** is a semi-autonomous agency established by law in 2006². HEC is responsible for advising the Minister on all matters relating to the accreditation of higher education institutions. It is also responsible for monitoring and evaluating the quality and standards of the higher learning institutions and ensuring the quality and enhancement of teaching and research.

The **National Council for Science, Technology and Innovation (NCSTI)** has been established by a decision of the Cabinet and is an independent advisory board to the Minister responsible for development, promotion and coordination of Rwanda's Science, Technology and Innovation and will direct and guide the national plan for research. The Directorate General of Science, Technology and Research is the secretariat for the Council.

The **Workforce Development Authority (WDA)** was established in 2009³ as a public institution with regulatory responsibilities for TVET and has administrative and financial autonomy. Its responsibilities include: the identification of TVET subjects; the development of standards and curricula; inspections; a labour market information system to support demand driven training; training of vocational and technical teachers; training of workers; examination and certification; accrediting TVET institutions; supporting entrepreneurship development; and the establishment of a National TVET Qualifications Framework. It is establishing subsidiary Integrated Polytechnic Regional Centres in each Province and Kigali City. WDA is also responsible for the procurement of equipment for all public TVET centres.

The **Institute of Scientific and Technological Research (IRST)** was established in 1989⁴ with the mission of contributing to the sustainable development of Rwanda through undertaking relevant research, training and technology development in the fields of applied sciences, life sciences and human sciences.

² Law No. 23/2006 of 28 April 2006 governing the National Council for Higher Education

³ Law No. 03/2009 of 27 March 2009 establishing the Workforce Development Authority

⁴ Law No. 06/1989 of 15 March 1989 establishing the Institute of Scientific and Technological Research

The **Rwandan National Commission for UNESCO** (CNRU) is responsible for coordinating activities related to UNESCO's interventions in Rwanda.

The **Umwalimu Savings and Credit Cooperative** (Umwalimu SACCO) is an independent agency but works in close collaboration with MINEDUC. Its aim is to provide teachers with subsidised credit which is to be used primarily for income-generating activities. In 2009, 82% of primary and secondary teachers were members.

2.4 Districts

With decentralisation and public service reform currently being implemented across Government, responsibilities for sector programme planning, implementation and monitoring at the District level lie with the District Education Offices. These include the following service delivery responsibilities:

- Preparation of the Five-Year District Education Development Plan and the Three-Year District Education Strategic Plan.
- Implementation of education policy and strategic plans
- Preparation of the budget and MTEF
- Monitoring and evaluation of activities in education
- Recruitment, deployment and payment of permanent teaching staff, within ceilings set by the Teacher Service Commission/REB
- Provision of information on employed teachers to MINEDUC through the Teacher Service Commission/REB
- Provision of all education statistics
- Transfers of teachers and students within the same district
- Follow-up of NGO education-related activities and reporting back to Provinces and MINEDUC
- Monitoring of school financial reports, use of capitation grants, teachers' salaries and school feeding.

Higher District authorities are also concerned with education in their Districts. For instance, the Vice Mayor in charge of Social Affairs is involved in teacher recruitment and retention and also issues instructions to education leaders in the District.

2.5 Management of learning institutions

The **pre-primary education** sub-sector has evolved over time and pre-schools are governed by laws and standards. The role of the Ministry of Education is at the level of policy making and supervision. Districts oversee the management and inspection of nursery schools and monitor how sectors and cells oversee the management of nursery schools and ECD centres. The administrative cell, particularly, has the official mandate of managing and monitoring nursery schools and ECD centres. The administrative cell's vital role is to sensitise parents to value education for their children as well as participate in education activities.

As part of the fast-tracking of the **Nine-Year Basic Education** (9YBE) programme some primary schools have been transformed into nine-year schools (*groupes scolaires*) offering the full nine years of basic education (6 years of primary and 3 years of lower secondary), while others are formal lower secondary schools (*écoles secondaires inférieures*) integrated into 9YBE. Schools are expected to have parent teacher associations (PTAs) to support the schools in planning and fund raising. They are also expected to have a more structured Parent Teacher Committee (PTC) with a role in management activities and finance. The PTC helps the school management to develop school improvement plans and maintain financial records in order to

improve planning and implementation of education sector policies at the school level. These implementation plans are the basis for self-monitoring and evaluation. Schools are expected to report their financial resources and expenditure to the PTAs and districts and to make sure information is publicly accessible.

The main source of finance in schools is the capitation grant. This is transferred directly from MINECOFIN to schools and is used for general school development and for recruitment of contract teachers. In 2010 the capitation grant for each primary school is calculated as follows: RWF 3,500 per pupil per year, RWF 32,617 per contract teacher per month, and RWF 15,000 per month for all teachers with upper secondary qualification (A2). For lower secondary schools, the amount per student per year is RWF 21,000 for a boarder and RWF 11,000 for a day student. Allowances for teachers are the same as at the primary level.

School governance

In 2008, 94% of primary schools had PTAs and 84% had more structured PTCs meeting on a more regular basis with a high degree of involvement in school administrative affairs including fund raising, monitoring and evaluation of teachers, hiring of contract teachers as well as in the management of capitation grant spending. There has been extensive training of primary and secondary school heads on financial management and the vast majority of schools have

Upper secondary schools do not receive a capitation grant per pupil but do receive funding for contract teachers (at the same rate as for lower secondary). Funds for school feeding are transferred directly from MINECOFIN to lower and upper secondary schools (RWF 75 a day for day students, RWF 156 for boarders).

For **technical and vocational institutions**, the Workforce Development Authority (WDA) has a governing board, which includes representatives from the public and private sectors. Vocational training centres and technical schools are managed similarly to schools, with PTAs working closely with the principals. The Integrated Polytechnic Regional Centres (IPRCs) are managed semi-autonomously by a principal and deputy principal supported by finance and procurement officers, although the overall budget is determined by WDA in collaboration with MINEDUC and MINECOFIN. Most of the financing is public at present.

Higher learning institutions have a Board of Directors and a Senate supported by an Academic Council advising on academic and strategic issues. Day-to-day management is carried out by a Rector supported by a Vice Rector, Academic, and a Vice Rector, Finance and Administration. The management team is supported by deans, directors and department heads. Private universities have a similar structure except that they are managed by a Board of Trustees that includes the owner(s)/founder(s). Financing of the public universities comes from a grant provided through MINEDUC as part of their overall budget allocation and this is supplemented by tuition fees, consultancy fees, development partners, NGOs and foundations, public/private partnerships and income generating activities.

2.6 Overview of the education system structure and qualifications

The following diagram illustrates the different levels of the education system from pre-primary to postgraduate, showing the final qualification at each level. During the period of this ESSP a National Qualifications Framework will be developed in collaboration with the REB Inspectorate, WDA and HEC which will define more precisely the level of knowledge and skills represented by each of the qualifications.

Education system: levels and qualifications

	Educational level	General Primary and Secondary	TVET	Teacher Education	General Higher Education
Post-Basic Education	Postgraduate			Postgraduate certificate qualifying to teach in HE ⁵	Postgraduate (Masters and above)
	A0			Degree with Qualified Teacher Status (QTS) for Upper Secondary	Degree
	A1		College of Technology diploma; TVET Grade 1	Diploma with QTS for Lower Secondary	
	A2 (3 Years)	A Level certificate (S4-S6)	TVET Grade 2; A2	Certificate qualifying to teach in Primary	
Basic Education	Lower secondary (3 years: S1-S3)	O Level certificate (S1-S3)	TVET Grade 3		
	Primary (6 years: P1-P6)	Primary Leaving Certificate			
	Pre-primary (PS1-PS3)	-			



⁵ recently initiated in KIE

Chapter 3: Strategies for Basic Education, Post-Basic Education and Cross-Sector Priorities

This chapter analyses the progress made so far at the levels of basic and post-basic education and outlines the strategic priorities for these sub-sectors over the coming five years. It begins by outlining the key areas which cut across the basic and post-basic sub-sectors and which will impact significantly on access, quality and equity throughout the education system. Strategic priorities for each of these key cross-cutting areas are also identified.

3.1 Cross-sector priorities

3.1.1 Introduction

In addition to the seven policy priorities (section 1.7) there are six cross-cutting areas which have been identified as key priorities for this ESSP. These cut across both the basic and post-basic levels of education and will impact significantly on achievement of national development goals. They are:

- English as the medium of instruction
- ICT in education/Open, Distance and e-Learning (ODEL)
- Science and technology
- Girls' and women's education
- Special needs education
- School health, HIV/AIDS prevention and sports

The following section details strategic priorities for these cross-cutting issues.

3.1.2 English as the medium of instruction

According to the Constitution there are three official languages – Kinyarwanda, French and English. Previously, a trilingual policy was adopted meaning that there was a choice of medium of instruction based on the linguistic background and experience of the pupils. However, with Rwanda's membership of the East African Community (EAC) and the Commonwealth, and the increasing development of international partnerships, the use of English has become more prominent and the need for literacy in English greater. It is seen as an important vehicle for trade and socioeconomic development and as a gateway to the global knowledge economy. It has also been expensive to maintain three languages of instruction in terms of learning materials and teacher education.

Against this background, a new policy was adopted in 2008 and implemented in 2009 to use English as the medium of instruction throughout the education system. This has led to a new configuration of roles and relations amongst the three languages: Kinyarwanda as the bedrock of initial literacy and learning; English as the new medium of instruction; and French as an additional language. The challenge for the education system is that current levels of English language proficiency amongst teachers are low – in a baseline survey in 2009, 85% of primary teachers and 66% of secondary teachers only had beginner, elementary or pre-intermediate levels of English⁶. Teachers therefore need to develop their own language skills as well as learning to teach in English. Pupils' own exposure to English is also limited, particularly in rural areas. There is a shortage of textbooks and readers in English and the language levels of some of the learning materials that are available are above the pupils' competence levels.

⁶ Source: Rwanda English in Action Programme (REAP) baseline survey, June-July 2009. Proficiency levels are based on the Common European Framework for languages.

Strategic priorities

With regards to in-service teachers a three-pronged approach has been adopted: face-to-face training, school-based mentoring and self-directed study. A system has been put in place to train trainers and mentors for each administrative sector. The trainers will carry out face-to-face training at training centres in every sector and mentors will operate at school level. Currently around 250 mentors have been trained. This will be scaled up to around 3,000, so that mentoring is available in all schools. Materials are also being developed for self-directed study. Pre-service teacher training also includes training in English (section 3.3.5).

All teacher educators, teachers and student teachers will have their language competency assessed through a standardised assessment tool. The test will be capable of determining whether teachers and student teachers are reaching the target levels of proficiency: intermediate for primary teachers, upper intermediate for secondary teachers and advanced for teacher educators. Teachers will be given the opportunity of taking the test as often as necessary to attain the appropriate certificate.

In addition to the English language instruction they receive in the classroom, pupils will be provided with a variety of support mechanisms to increase their exposure to English. This will include new textbooks and readers in English at appropriate levels, interactive radio instruction, e-learning materials, and access through radio, television, DVDs, mobile phone technology and other ICT devices.

3.1.3 ICT in education

ICT is a key driving force for economic development in Rwanda and there is a strong political will and commitment in this area under the leadership of H.E. President Paul Kagame, who champions ICT initiatives. Currently a national communication fibre optic network with cross border connection to submarine cable is being laid across the country and is due to bring connectivity to all 30 districts. There are also sustained efforts to develop electricity coverage and to reduce access costs through import tax exemption on ICT devices.

Several guiding documents set out objectives for ICT development in Rwanda, the most comprehensive being the National Information and Communication Infrastructure (NICI) plan Phase 2 (2006-2010) in which education represents one of the core pillars. Within this framework and in consultation with key partners, an ICT in Education Policy has been developed and will be accompanied by a strategic implementation plan.



President Paul Kagame launching the One Laptop Per Child initiative

In spite of this favourable political context, many challenges still need to be overcome in order to disseminate the use of ICT throughout the nation and in education more specifically. With limited national electricity coverage and IT infrastructure, access to ICT in the education system is extremely low, with the exception of HLIs. In addition there is a lack of clear understanding of linkages between ICT and expected education outcomes. Even when ICT in education initiatives are taken up, the limited availability of digital learning material, lack of expertise and project management skills, capacity gaps among teachers to integrate ICT, lack of technical support and inadequate coordination of initiatives frequently hinder their success.

Strategic priorities

With the overarching objective of disseminating ICT throughout all educational institutions to help attain quality education for all and equip learners with 21st century skills, six strategic areas will be given special focus, namely:

1. promoting an ICT in education culture - through the development of outreach material and the building of a common platform designed to raise awareness of the benefits and limitations of ICT in education, share ICT in education resources and good practices, and position Rwanda with regard to international standards and the EAC in particular;
2. fostering and managing ICT in education initiatives through development of a framework and guidelines to build and strengthen partnerships between different stakeholders and encourage participation of local institutions (private, public and civil society) in ICT in education;
3. expanding ICT infrastructure to increase access through providing power, connectivity and equipment to educational institutions, particularly at the primary and secondary levels and outside the main cities and maintaining and upgrading existing infrastructure;
4. developing capacity to integrate the use of ICT into education practices through training of teaching staff on integrations of ICT into the teaching practice, development of ICT standards and competencies and provision of technical and pedagogical support in schools;
5. developing and distributing quality digital content and ensuring that this content is adapted to the Rwandan context and aligned with the national curriculum;
6. establishing Open, Distance and e-Learning (ODEL) through development of an ODeL policy and costed strategy, building on existing initiatives at the higher education level through development of bridging courses for entry into NUR and using the Rwanda Education Commons programme as a vehicle for increasing teachers' knowledge and pedagogical skills through ODeL. Training institutions in underserved areas will be particularly targeted as will learners at the secondary level who have dropped out of the education system. As ICT in education is a particularly dynamic field, innovative solutions in the areas of infrastructure, capacity and digital content development will be fostered whenever possible in order to answer needs in those rural areas where alternative ICT in education solutions are required.

3.1.4 Promoting Science, Technology and Innovation

Science, Technology and Innovation (STI) are widely seen as dominant factors behind rapid economic and industrial growth. Globally, newly industrialised countries have had to master the use of imported and indigenous technology in order to achieve economic development at par with the developed countries. The Government's Vision 2020 statement, its National Policy on Science, Technology and Innovation, and the EDPRS are all based on the premise that, through embarking on a concerted effort to build science, technology and innovation capacity, Rwanda will greatly enhance its prospects of achieving the growth, poverty reduction, wealth creation and export diversification objectives. In particular the 2005 National Science Technology and Innovation Policy responds to the Vision 2020 challenge of transforming Rwanda into a 'modern nation able to generate and disseminate technological knowledge and information'. The policy recognises that an effective approach to STI capacity building must include policies to promote knowledge acquisition and deepening, knowledge creation,

knowledge transfer and a culture of innovation in order to (i) promote sustained growth of GDP; (ii) advance the quality of life and standards of living for the citizens; (iii) improve skills and knowledge among the population; (iv) maintain viability of and enhance opportunities for growth in rural areas; and (v) integrate technical education with commerce, industry and the private sector.

A Science, Technology and Research Directorate was created within MINEDUC in 2009, together with the establishment of a National Council for Science, Technology and Innovation (section 2.3.2). These two bodies will oversee the development and implementation of a national strategy for the development of science and technology in line with national policy in order to support the above objectives.

Strategic Priorities

The STI Policy forms the basis for an operational integration of the science and technology education programme. The key strategy will be to address the under-developed skills in all areas of science and technology and the limited resources in teaching institutions to support the teaching of quality science and technology education. This will include: improvement of the science and technology environment in schools, promotion of gender equity in science and technology streams, building capacities for management, monitoring and evaluation of the impact of science and technology education, development of high quality and appropriate science and technology curricula, training teachers in science and technology, and ensuring that quality research is conducted with practical application to national needs, both for improving the well being of people in Rwanda and supporting economic growth.

3.1.5 Girls' and women's education

There is strong Government support in the area of girls' education as a cornerstone to realise its goal to provide quality fee-free basic education to all. The Government is committed to ensuring that women are also well skilled beyond the basic level to contribute positively to economic and social development. The Girls' Education Strategic Plan was approved in 2009 and forms the framework for interventions to increase girls' participation and achievement at all levels of education. National sensitisation programmes exist to encourage parents and communities to send and keep their girls in school, such as the First Lady's national awards for the best performing girls and the School Campaign. The National Taskforce for the coordination of girls' education was established in 2005 and similar taskforces have now been established in every District.

But key challenges remain with regards to the quality of girls' education which impact negatively on girls' performance across the board and inhibit their chances of progress in certain fields, especially science and technology where they have poor access. Boys outnumber girls on science and technology courses at PBE level including in TVET. There remains a divergence in the subjects studied by boys and girls: in 2009 only 36% of pupils in maths-physics streams were girls. In technical subjects the rates were 14% in electricity, 3% in general and automobile mechanics, 7% in construction. Girls tend to select subjects that are more traditionally associated with female occupations, such as accounting (64%) or secretarial (87%)⁷. Women are also under-represented amongst PhD students and HLI teaching staff: of the 52 professors in public institutions, only 7 are women, and of 120 senior lecturers only 13 are women.

Even though girls' enrolment is at a slightly higher rate than boys' at the basic level, they lag behind boys in performance at primary and secondary levels. This is due mainly to teaching practices which are not gender sensitive and socio-economic factors leading to low attendance and inadequate study time which result in poor educational opportunities.

⁷ Source: Girls Education Strategic Plan 2009

Strategic Priorities

The overall strategic objective is to guide and promote sustainable action aimed at the progressive elimination of gender disparities in education and training as well as in management structures. This will require:

- developing gender sensitive and learner-centred methodologies;
- training of educationalists, trainers and education planners in gender issues;
- reviewing education curricula and learning materials from a gender perspective;
- sensitising families and local communities about the importance of girls' completing and improving achievement in formal education;
- promoting affirmative action policies, where appropriate, to ensure equal opportunities for girls;
- integrating girls' education into District plans and budgets.

Addressing gender issues
Gender disparities are addressed in various sections of the Plan. For example, the need for gender equity in science and technology is addressed in section 3.1.4, gender and health in 3.1.7, poor performance of girls in basic education in 3.2.2, girls' participation in upper secondary in 3.3.4 and gender

In addition, actions will be developed to address the under-representation of women amongst PhD students and HLI teaching staff.

3.1.6 Special needs education (SNE) including orphans and vulnerable children (OVCs)

Previously the education of learners with special needs focused exclusively on those with disabilities and though this view has been pervasive the current policy is to view all educationally vulnerable groups of learners such as orphans, street children, children infected with or affected by HIV/AIDS or children heading households - commonly referred to as OVCs - as learners with special needs. There are a number of Government policies and laws that cater for people with special needs including educationally vulnerable learners, most notably the national Constitution and the 2007 MIGEPROF policy and strategic plan on OVCs. There is already a Special Needs Education Policy. Civil society is particularly active in this area and has supported the formation of clusters for SNE/OVCs organised around the child friendly school concept. In general the aim is to integrate learners with special needs within the formal system.

But there remains a lack of common understanding about the categories of learners with special needs as often the focus has been on learners with physical disabilities when other groups also need tailored support. In addition there is a lack of reliable statistics. Poor coordination and monitoring and evaluation inhibit further progress in this area. The higher education sub-sector also still has limited capacity to accommodate students with special needs.

Strategic Priorities

The overall objective is to ensure that all categories of learners with special needs access quality education services. Key strategies to achieve this will be:

- reviewing the existing SNE policy to ensure it caters for all relevant groups;
- providing a minimum package of material support to learners with special educational needs;
- providing flexible and accessible alternative opportunities for learners with special educational needs;
- training, deploying and supporting teachers and technical staff in special needs education;
- sensitising parents, learners and communities on the importance of education for learners with special needs;

- integrating provision for learners with special needs within District plans.

The national SNE taskforce will be operationalised to ensure adequate structures are in place for SNE provision, with a view to eventually establishing District level taskforces to spearhead the effective education of all learners requiring SNE in inclusive and/or specialised education settings.

3.1.7 School health, HIV/AIDS prevention and sports

At primary/basic level, many children are affected by varying levels of malnutrition, alongside a lack of awareness about nutrition, hygiene, sanitation and disease prevention. For girls reaching puberty, menstrual issues can affect attendance and performance, while boys may also experience adolescent challenges. There is often a lack of information and understanding about HIV/AIDS in terms of infection, prevention, care and treatment and this affects both pupils and teachers.

Post-basic education provides particular challenges for boys and girls. For the teachers and non-teaching staff there is the challenge of dealing with HIV/AIDS in the workplace due to stigma, and most teachers do not know to handle the subject in the curriculum. In addition trauma associated with both post-genocide stress as well as extreme vulnerabilities often requires special counselling, care and support. The importance of sports or games in building healthy bodies and intelligent minds is also under-emphasised in many schools.

Strategic Priorities

The major focus is to improve the general state of health as well as the physical, psychosocial and environmental conditions in schools. One major priority is to develop a national school feeding/gardening programme which is owned by communities, including provision of milk to primary pupils. Given that good health and hygiene practices should be learnt in the home, a key strategy is to ensure that ECD parenting programmes include training on health, nutrition and hygiene issues.

All school improvement plans and school management and evaluation programmes will be expected to prioritise the promotion of health, nutrition, hygiene and sanitation services in schools. These plans and programmes should also include provision for physical education in schools which will complement the priority of developing playgrounds and sports fields. In order that teachers are given models of good practice during their training, good health and hygiene practices including first aid will be prioritised in TTCs. Support will be given to girls in obtaining sanitary towels and special facilities for girls will be established to reduce absenteeism and poor performance.

Addressing HIV/AIDS

HIV/AIDS is addressed in various sections of the Plan. For example, issues of HIV/AIDS orphans and of child-headed households are addressed in section 3.1.6, the limited programmes addressing the issue in basic education are noted in 3.2.2, the need to address HIV/AIDS in upper secondary in 3.3.4 and in teacher education

The education sector has a central role in the multi-sectoral response to HIV and AIDS prevention through increasing awareness and enabling a positive attitude to HIV/AIDS in the workplace environment. This can be done through the curriculum, teacher training, peer education, debating and life skills clubs.

3.2 Basic education

3.2.1 Introduction

The basic education programme is a cornerstone of this ESSP. The vision is to have every child access nine years of quality basic education by 2015. The programme includes early childhood development, 6 years of primary education, 3 years of lower secondary education and adult literacy. It provides the foundations of literacy, numeracy and child development needed to ensure better quality students for secondary and tertiary levels of education, and for the labour market.

3.2.2 Access, retention and equity

Enrolment has significantly increased over recent years with primary gross enrolment reaching 127.3% in 2009, reflecting an improvement in the school-age enrolment pattern. Primary net enrolment reached 92.9%. Improvements have been made in narrowing the gap in access to primary education between poor and rich, and according to location (urban/rural).

Fast-tracking of the 9YBE began in 2009. An ambitious school construction programme led by communities resulted in over 3,000 classrooms and 9,000 blocks of latrines being constructed to accommodate the new influx of students. Access to secondary education is no longer based on the Primary Leaving Examination.

In terms of other programmes to encourage retention, school feeding and school gardening programmes are now in place in 300 schools with the support of development partners. Other important initiatives are the de-worming programme carried out in all primary schools over the last two years and the integration of school health, including prevention of HIV/AIDS and other diseases, into the curriculum in primary and secondary schools.

With regards to adult literacy, Rwanda, in comparison with many other countries in Africa, is doing well. The most recent household living conditions survey (EICV 2005) indicates that 65.3% of the population aged 15 years and above are literate. There is a higher literacy rate for men (71.5%) than women (60.1%). Efforts to tackle adult illiteracy have been initiated, focused on the development and distribution of learning materials. Partnerships have been developed with faith-based and civil society organisations, and guidance has been provided to adult literacy centres and associations, along with training and materials on demand.

However a number of key challenges remain in regards to access, retention and equity in basic education namely:

- **Low completion and high drop-out and repetition rates** – in 2009, for primary schools 75% completion, 15% dropout and 15% repetition (for lower secondary 92% completion, 3% dropout and 5% repetition). Much of the reason for slow progress appears to be related to parents' perceptions of the balance between the employment prospects opened by basic education and the need for children to support family livelihoods. As household expenditures on basic education are still relatively high and the employment prospects opened by basic education are often perceived as low, there continue to be both financial and other barriers to access;
- **Poor performance of girls and other vulnerable groups of children.** Of the children achieving results in the first division in the P6 national examination in 2009, 60.7% were boys and 39.3% girls. The difference was wider at the S3 national examination with 68.2% of those in the first division being boys and only 31.8% girls.
- **An insufficient number of adequate learning spaces.** The current pupil:classroom ratio is 70:1, although the introduction of double shifts in primary education has reduced the overcrowding of classrooms. In particular, there are shortages of infrastructure for lower

secondary which reduces opportunities for increased transition from primary to full basic education. However the recent involvement of communities in classroom construction is addressing this problem.

- **Poor hygiene in schools and lack of community ownership of school health, sports and hygiene.** A large number of schools lack safe water supply. There is also limited Government ownership and low community and parental participation in school feeding and school gardening programmes at the primary level. There is a need to encourage physical education in schools not only for learners' health but also to address psychosocial needs and to inculcate key skills such as team-working. Most schools have neither a functional first aid kit nor access to a nearby health clinic. TTCs do not always provide teacher trainees with a model of good practice in this respect. In addition HIV and AIDS education is limited;
- **Lack of preparedness for education during emergencies.** The series of earthquakes in 2008 which affected the Western province left 27,000 children out of school.

With regard to adult literacy, the constraints include the low number of trainers, and their quality and motivation; a lack of reliable statistical information; inadequate learning/teaching resources; and poor co-ordination between the main providers of adult literacy.

Strategic Priorities

Over the next five years each of these areas will be addressed as a high priority. Strategic interventions will be used where these will address the key barriers to equitable basic education. Examples of such interventions include (i) the current double shifting policy, and (ii) the completion of a programme of construction of lower secondary classrooms to support the rapid expansion of student numbers.

Schools and communities: To retain girls throughout the nine years and improve their overall performance a number of measures will be implemented including wider community sensitisation, particularly of leaders, counselling, and better provision of water and sanitation facilities for girls. Civic authorities, civil society and faith-based groups will be enlisted to attract the out-of-school children, many of them orphans and children with special needs, to catch-up centres and similar facilities, with the goal of eventual integration into the formal school system. To ensure that all children including those from the poorest quintile attend school, the remaining financial barriers will be identified and tackled, including through the Vision 2020 Umurenge Programme (a social protection programme at the administrative sector level). School PTAs will be encouraged to support and counsel such children and their parents. Communities will also be expected to follow up on discipline issues and management of disruptive children.

School expansion: Expansion of primary schools to provide full nine-year provision will be prioritised where land and finance allow, including in some cases expansion to upper secondary education. Construction of classrooms, science laboratories and teachers' houses will be accelerated through a number of measures including increased community involvement in construction, using in some cases construction materials (cement, iron bars, iron sheets, etc) supplied by Government. In addition the use of low-cost materials will be expanded where appropriate, for example through the use of stabilised soil blocks and hydraform blocks. Greater emphasis will be given to construction of multipurpose facilities, for example, science laboratories (or science kits at primary level), computer laboratories and sports facilities. New regulations will require sufficient provision of water and sanitation facilities in schools across the country as currently there is a wide disparity in the proportion of schools in which there are water facilities.

School facilities: Given the slow pace of rural electrification, with only 19% of all schools having access to electricity (although in Kigali it is close to 75% of schools), alternative sources

of energy will be provided such as solar panels, biogas and generators where affordable. A major new development will be ensuring better physical access and working environment for special needs pupils, particularly the disabled and visually impaired. This will be encouraged through the mainstreaming of child-friendly schools. Schools and their local communities will be trained in proper maintenance and monitoring of all infrastructure and equipment. Guidelines and standards on education infrastructures will be used as a reference for all school construction.

School health: Nutrition will be addressed through the curriculum and development of gardening programmes, and where appropriate the one cup of milk per child programme and/or school feeding programmes. Sanitation and general hygiene can also be addressed by the curriculum as well as good school practices, e.g. using toilet facilities and hand-washing. Integration of basic health facilities in schools will also be encouraged. In terms of HIV/AIDS the key messages will be focused on awareness and prevention.

Education during emergencies: Within the framework of the Government's Disaster Management Taskforce and Plan which includes the Ministry of Education, an emergency preparedness plan in education will be developed to ensure that there is little or no interruption to educational services. A key part of this plan will be ensuring that there are pre-positioned emergency supplies for the most affected Districts so that they can respond quickly to emergencies. An education package for the informal education of refugee children in transit camps will also be developed.

Adult literacy: A first priority will be the development of a mechanism to collect reliable data on adult literacy including quality, and then to complete the policy on adult literacy. A harmonised curriculum and training system for adult literacy trainers will also be developed with an emphasis on functional literacy and livelihoods along with a scheme for motivation/compensation of literacy instructors. With support from international partners such a proper coordination mechanism for providers will be put in place. In the framework of the planned National Service, secondary school graduates will deliver adult education before they join higher education.

3.2.3 Quality

Fast tracking of the 9YBE programme has resulted in over 88% transition from P6 to S1. Several strategies have been adopted to put this policy into effect including reduced class sizes through double-shifting, specialisation of primary teachers, and the reduction of core subjects from nine to five in grades 1-3, and from 11 to six subjects in grades 4-6.

There have been challenges in implementation of these strategies which may impact negatively on quality in the short term such as in the management of the double-shift system which has placed an additional burden on teachers. However additional support and training have been provided to teachers and school heads to combat these challenges. Key principles of the child-friendly schools approach have begun to be mainstreamed to improve quality and overall learning achievement. The child-friendly norms enshrined in the *Quality Standards in Education for Nursery, Primary and Secondary Schools*, approved in 2008, have been used as the basis for all school inspections to assist schools in better management to assure quality.

Child-Friendly Schools

A child-friendly school is defined as one that is:

- inclusive
- safe and protective
- health promoting
- gender sensitive
- academically effective
- involved with the

While 9YBE has been a focus in recent years, it is also important to address Early Childhood Development (ECD). Investing in the early years of a child's life impacts significantly on his/her success within the education system. ECD covers the

provision of integrated services including health, nutrition, water, sanitation, pre-primary education and protection for the 0-6 age group. This Plan focuses on the aspects of pre-primary education which are the main responsibility of MINEDUC. However it is important to recognise this as part of a broader inter-sector strategy, led by MINEDUC in partnership with MIGEPROF and MINISANTE. In Rwanda pre-primary education provision has grown recently due to the active participation of communities, the private sector and civil society organisations in this area. Gender equity has also been achieved. In-service training for pre-primary teachers and school inspections has begun.

The main challenges to improving quality include:

- **Poor school readiness of children who enter P1** – It is estimated that in 2008-2009 only 13.3% of pre-primary school-age children attended pre-primary school even though demand is high as exemplified by the pre-primary teacher/pupil ratio (1:33.5) which far exceeds the internationally accepted norm (1:15)⁸. In 2005, the DHS found that 70% of women with one or two children and 74% with three or more children worked outside of the home. Currently, ECD centres lack standards, care-giver training, supervision and monitoring. The 2009 *National Skills Audit* found that no training programme exists for teachers, principals and supervisors of pre-primary schools. There is a high rate of teacher absenteeism as many of the teachers are volunteers without regular salaries, depending on the support of parents, communities or private sponsors.
- **Insufficient supply of quality textbooks and learning materials across all subjects** - The cost of teaching and learning materials is a concern to schools and parents. This is in part because competition, especially outside Kigali, is limited. The limited extent to which schools are aware of what is available on the market is also an issue. However, the range of e-learning materials available in Kinyarwanda and English is being expanded and the range of readers in these languages is being improved through encouraging more local authors including teachers to write books for basic education. A major reform of textbook policy is underway.
- **Financial constraints limiting the recruitment and retention of more qualified teachers, thus affecting teacher classroom performance** - A recent teacher motivation survey reveals that teachers are becoming increasingly concerned about poor job satisfaction and low motivation. This is to a large extent being attributed to the poor monetary rewards and deteriorating standards of living compared to other professionals with the same level of educational attainment. Although most primary school teachers are qualified (97%) few have been trained in the use of modern teaching techniques including learner-centred approaches. The numbers of teachers have increased partly through contract teachers, thus reducing the pupil/qualified teacher ratio from 74:1 in 2005 to 66.7:1 in 2009.
- **Lack of systems to improve and monitor learning achievement, particularly basic literacy** - Although a comprehensive examinations system exists there is no national system to monitor children's acquisition of key basic skills such as literacy and numeracy and schools do not have remedial programmes in place.
- **Weak school management and leadership and community engagement** - Although the vast majority of schools have Parent Teachers' Associations (PTAs) and most have Parent Teacher Committees (PTCs) there is still poor school management and leadership particularly in the important area of financial management and accountability. The recent construction programme encouraged greater involvement of the wider community who were called upon to support efforts to build additional classrooms and latrines, however this was an ad-hoc initiative for a specific intervention. Normally parents and members of the community who are not members of PTAs and PTCs are generally unaware of schools' activities and are an underutilised resource who could support school management and

⁸ Source: MINEDUC ECD Policy 2009

leadership. Community involvement in areas related to quality and equity such as tackling high drop-out rates and the poor performance of girls and other vulnerable groups of children could yield positive results.

Strategic priorities

The core principles of the child-friendly schools will be mainstreamed throughout the system, based on a costed strategy. A planned and costed strategy for acquisition of English language skills by teachers and pupils will be implemented backed up by additional teaching/learning materials, using the methodology to influence the teaching of other subjects. Parental involvement in their children's learning activities will be encouraged.

Early Childhood Development: Given the urgent needs of Rwanda's infants, young children and their care-givers, strategies will begin to be implemented simultaneously at all levels, from *imidugudu* (village) and Districts to central levels. The national level ECD steering committee consisting of the responsible Ministers from MINEDUC, MIGEPROF, MINISANTE and MINALOC will give strategic direction in this area. The technical taskforce will oversee implementation. With specific regard to the education sector the strategies will include: development of demonstration pre-primary schools/Community Integrated ECD Centres (ideally one per administrative sector); the planning, field-testing, updating and dissemination of high-quality curriculum and materials; development of pre-service ECD teacher training and strengthening of in-service training; regular updating of pre-primary standards, regulations and guidelines and development of a public and private financing model to ensure long-term sustainability and nationwide expansion of ECD services.

Textbooks and learning materials: Access to a greater range of cheaper quality learning materials will be achieved through the formation of the minimum profile recommended book list. Distribution and coverage will be improved through the decentralised selection and procurement of textbooks and readers based on delivery to schools by publishers and booksellers. Head-teachers and teachers are expected to increase their familiarity with the available materials and make better use of them in the classroom, and this will be backed up with nationwide training. The decentralised textbook selection policy will help to encourage cheaper quality learning materials and better use of materials by teachers. There will be an improvement in the pupil:textbook ratio, although this will not be achieved until the replacement of French medium books by English medium books has been completed. New readers in Kinyarwanda will be introduced to support developing early literacy.

Teachers: Section 3.3.5 identifies key strategies for improving the management of teacher education. Teacher recruitment will be boosted by increasing capacity at the current TTCs and CoEs. In terms of teacher retention and motivation a number of measures will be implemented including a bonding scheme for teacher training college graduates, access to open and distance learning, improved salaries and conditions of service, and acquisition of computers and ICT skills. Additional funding for the teachers' co-operative scheme Umwalimu SACCO will be sourced. A decentralised Continuing Professional Development structure will be developed both for in-service training and upgrading of practising teachers. Improvement of science, maths and ICT teaching through in-service teacher training will be continued, supported by e-learning and other self-access materials. This will be supported by provision of new curricula and sufficient equipment and materials for science laboratories.

Improvement and assessment of literacy and numeracy: Monitoring of actual classroom performance will be prioritised by the Inspectorate and school heads, backed up by school-based and national assessment of English, maths and science. The latter will be carried out on a sampling basis for grade 3 initially. A comprehensive Monitoring and Learning Assessment system will be developed and implemented. Its focus will be on assessing the acquisition of skills, attitudes and values from the beginning of the lower primary level. It will also assess and

evaluate the teaching and learning process including the adequacy and relevance of the curriculum, teaching practices and learning materials. The possibility of Rwanda joining into a regional assessment system will also be explored. In addition a common literacy approach for lower primary will be adopted supported by class readers and school libraries, with appropriate pre-service and in-service training in the methodology.

School management and leadership and community engagement - The success of a school depends on the calibre of its leadership therefore the training of head-teachers and key members of the school management team, PTAs and PTCs will be prioritised to ensure that all are equipped with the skills needed for effective school management and leadership. Parental involvement in their children's learning activities will be encouraged through sensitisation campaigns led at the school level and supported at the decentralised level. Training of school leaders and PTAs will incorporate management of activities to encourage the active involvement of parents. The role of the Inspectorate in supporting and supervising school self-evaluation and facilitating stronger decentralised management will be addressed.

3.3 Post-basic education

3.3.1 Introduction

Post-basic education (PBE) is defined as all education and training provided after basic education. In Rwanda, this covers four sub-sectors: (a) general upper secondary education, (b) teacher education, (c) technical and vocational education and training (TVET) and (d) higher education (HE). The aim is to ensure that more students can access PBE and that the skills students acquire in PBE meet labour market needs. The compound effect in the long run will be to reduce the cost of labour.

The access to and quality of PBE are inextricably linked to that of basic education. The pre-condition for quality PBE sub-sectors is basic education graduates who are equipped with the essential skills, attitudes and knowledge needed to succeed at the PBE level. This implies that those completing basic education should have adequate literacy and numeracy levels, but also skills in the area of communication, teamwork, critical thinking, problem solving and use of information technology. Similarly the size and quality of PBE has a significant impact on the quality of basic education given that all teachers at the basic education level should be graduates of PBE. The successful establishment of 9YBE has enabled a shift of focus in planning towards PBE for the next five years and beyond. Increasing rates of completion at one level of education put pressure on access to the next.

Increasing demand for PBE

There is global evidence that as economies begin to grow so the demand for a more skilled and responsive workforce with higher level competencies increases. Improvements in the skills base of the workforce go hand in hand with the transition of economies from largely agriculture-based to economies that increasingly depend on more sophisticated manufacturing and service sectors;

According to a recent World Bank funded study, the share of the working force with a post-basic education is currently around 4%. The relatively high earnings of workers with these levels of education are a clear indication of the demand for skilled workers in the labour market. The National Skills Audit confirmed the acute shortage of human capital at technician and professional levels and the gap between present availability and what is required to meet the aspirations of Vision 2020 and the EDPRS. There is therefore an overwhelming need to take a holistic approach to skills development, bringing together the key education sub-sectors to focus on overcoming the skills deficit in a well-coordinated and integrated manner.

The focus now is on managing post-basic education as a coherent whole and addressing key strategic issues, particularly equitable access – including improving the opportunities for vertical and horizontal student mobility, and provision of targeted scholarships and bursaries. Quality at all levels will receive attention. To ensure the sustainability of recent gains, emphasis will be given to facilitating quality private provision, and developing public private partnerships to broaden the range of choice and extend opportunities. Similarly, emphasis will be placed on establishing sustainable financing mechanisms and well-coordinated, effective and efficient management systems. The recent move of responsibility for science, technology and research to the Ministry of Education will mean priority attention can also be given to applied research and knowledge transfer.

3.3.2 Link to economic growth, skills and employment

As the economy grows and diversifies there is a need for higher level skills. However, the quality of PBE graduates is not adequate to serve the economy's needs. The National Skills Audit report published in 2009 identified skills gaps across all sectors. In addition, a World Bank funded study in 2009 showed that the existing PBE provision has weak linkages to the labour market with low employability of its graduates and incompatibility with employers' needs. With expected increased competition from the other members of the East African Community, it is urgent that these issues be addressed.

There is limited information regarding the employability of PBE graduates. There are indications that a majority of PBE graduates who seek employment will find it, but there is also evidence that only a minority of such graduates work in a job which is directly related to their level of education or specific training. According to the EDPRS only 25% of TVET graduates are absorbed by industry, and there is a high level of unwaged employment particularly in the agricultural sector. A challenge is therefore to improve the linkage between PBE and labour market needs. Greater relevance, leading to higher rates of employability, in the sub-sectors outside higher education, especially TVET, will raise their status and value. There is also strong evidence that general secondary education can provide suitable graduates for the private as well as the public sector and that in some cases these graduates earn higher salaries than TVET graduates.

One of the reasons for the mismatch between graduates and the workplace is lack of guidance provided to students during basic education and during PBE about further education and careers. There are currently very few careers centres, careers guidance officers or specialised careers teachers within institutions. Improving the awareness of students and parents is also expected to lead to pressure on institutions to become more relevant.

'Catalytic skills'

There is evidence from studies undertaken for MINEDUC in 2009 as well as from the experience of other countries that employers value highly good skills in communication, problem-solving, teamwork, creative and critical thinking, and an understanding of how businesses work. These are referred to variously as 'general' or 'generic business skills', as 'transferable skills', as 'skills for employment' and more recently as 'catalytic skills'. These highly relevant skills may be learnt during general education (for example in upper secondary schools) or as a key part of a TVET or HE programme. The shift to a more learner-centred pedagogical approach

Strategic Priorities

Skills development will be prioritised across all sub-sectors. In general secondary education, this does not mean vocationalisation of the curriculum but strengthening the development of 'catalytic' skills – for example language skills, communication, science, technology and ICT. All PBE institutions, including upper secondary schools will be expected to develop closer links with the world of work, for example through work attachments, and to involve employers in course design and review where appropriate. To ensure that students at all levels of PBE can

access careers guidance, teachers will be appointed and trained to provide advice and guidance. The Rwanda Development Board has already initiated a programme to establish careers centres in the higher learning institutions (HLIs). To monitor the effectiveness of the increased focus on demand all institutions will undertake tracer studies of their graduates.

3.3.3 Harmonisation and management of the sector

There are a number of bodies with oversight responsibilities for parts of PBE: MINEDUC's PBE Directorate, REB, WDA, HEC, and to some extent Kigali Institute of Education (KIE) in relation to the colleges of education. However, these bodies have different types of responsibility and established lines of communication and some have only recently been created, so harmonised strategies have not yet been developed. The relationship with the institutions does not yet extend to monitoring strategic plans and performance targets. Quality assurance frameworks for three of the four components of PBE are yet to be established at national and institutional levels.

PBE relies greatly on private provision: over 50% of secondary, TVET and higher education provision is private. Given the investment required to expand PBE, private sector involvement in providing programmes will need to be encouraged and, to avoid duplication and wastage, public provision needs to focus on providing essential skills which private providers cannot provide in sufficient quantity. This also requires more effective information sharing and coordination, and strong mechanisms for quality assurance and accreditation.

Regular communication and coordination with the relatively small private sector has already been established, especially through the Private Sector Federation, but this will need to be strengthened and expanded over the next five years. Some strategic public-private partnerships have been developed – for example a recent initiative led by the World Economic Forum to develop an ICT strategy for Rwanda – and scope for more extended initiatives will be explored over the planning period.

Strategic Priorities

MINEDUC's new PBE Directorate's initial focus will be on ensuring better coherence across the PBE sub-sectors, including coordination with the semi-autonomous agencies that remain outside of the REB structure (WDA and HEC). A key element in coordination, monitoring and evaluation of PBE will be the establishment of a set of qualifications frameworks, a PBE-wide quality assurance system and PBE quality standards. The intention is to develop a set of qualifications frameworks, and eventually a single PBE framework, that is aligned with other frameworks in the EAC.

A further strategy will be to develop a forum for information sharing and coordination with private providers at both national (centralised) and district (decentralised) level. Extending reliance on private provision, particularly for TVET, will require both financial incentives and also close monitoring through a strong accreditation system to ensure that the appropriate standards are maintained. There is already an accreditation system in higher education but one is yet to be fully developed for TVET.

Stronger links will also be established especially between the private sector, WDA, universities, and careers guidance offices in schools and training centres. This will include where possible internships and work attachments.

3.3.4 Upper secondary

Access and retention - On average an individual completing upper secondary education earns almost double the income of someone who has completed only lower secondary. However, although enrolment in general upper secondary has increased over recent years, overall figures remain low with net enrolment of 13% in 2009.

It is expected that demand for upper secondary will increase rapidly over the next few years following implementation of 9YBE. This will place the upper secondary system under pressure to increase its capacity to absorb this influx of students, requiring investments in infrastructure, materials and teachers. No new public or grant-maintained secondary schools have been constructed in the last eight years resulting in limited growth in enrolments in the public schools. Between 2008 and 2009, enrolment growth in upper secondary totalled 7,267 students, with the private sector growing by 7,485 students and the public sector decreasing by 218 students. While girls' enrolment and retention has improved, there is still need to address their participation, particularly of girls in rural communities, as well as participation of poor and vulnerable groups.

It is important that adolescent boys and girls develop clear understanding about reproductive systems, and HIV and AIDS prevention, particularly for when they leave school to pursue adulthood. However many schools do not provide this kind of preparation for life, and it can be a challenge when they join higher learning institutions and workplaces.

Quality - In 2009 practical skills assessment was introduced in sciences as part of a move away from purely theoretical teaching and assessment. However, this positive move still needs to be supported by more practical teaching and the appropriate resources and infrastructure (e.g. well-equipped science laboratories). Students within upper secondary are being encouraged to focus on either science or humanities streams, enabling more effective timetabling, utilisation of teachers and procurement of appropriate textbooks. The introduction of English as the medium of instruction means that students in both streams will require improved communication skills in the language. The public sector teaching force grew by around 1,150 teachers maintaining the teacher-student ratio at around 38:1. However there are still shortages of trained graduate teachers for upper secondary particularly in sciences, mathematics and ICT. REB's Inspectorate undertakes inspections of general upper secondary, with the capacity to visit each upper secondary school at least once every two years.

Relevance - Upper secondary schools have traditionally been treated as solely a preparation for higher education, while in fact a large share of upper secondary school graduates enters the labour market directly. The curriculum and teaching practices should ensure that secondary school completers are prepared for both pathways. Employers and HLIs want upper secondary graduates with transferable skills such as good communication, problem-solving and teamwork. They therefore expect that, in addition to academic learning, teaching methods and curricula at upper secondary will instil these essential skills and attitudes to equip students for further studies and the labour market. There is evidence that some employers value the general skills of upper secondary graduates more than the narrower technical skills of TVET graduates. In addition, the more transferable skills are expected to contribute to the productivity of entrepreneurs both in the formal and informal sectors.

Management and finance - To meet the demands of Vision 2020 and the EDPRS, all PBE institutions – including upper secondary – will need to be more business-like in character and management style, with an acceptance of the need to generate some of their own income. Improved governance, including more active involvement of PTAs, will assist with this. In addition, at the moment the majority of public upper secondary schools are boarding schools in which school feeding remains a major cost-factor, and therefore a barrier to increased access.

Strategic Priorities

To manage the high costs of upper secondary and increase access and equity, a number of efficiency measures will be put in place. As school feeding costs in boarding schools are extremely high, more day schools will be developed, particularly by expanding schools currently offering 9YBE to offer full secondary education. Unlike for basic education, school fees

are still required for upper secondary so bursary and scholarships schemes will be harmonised to address the needs of the poorest and vulnerable students.

REB's curriculum development agency will review the upper secondary curriculum and assessment to encourage development of more appropriate catalytic skills for both the workplace and higher education. These will include reproductive health and HIV and AIDS prevention. Students from upper secondary will be enabled to access vocational courses at different levels of the TVET system. These reforms will be combined with training for upper secondary teachers on student-centred teaching approaches, as well as improved English language skills. A programme of construction and equipping of more all-purpose science laboratories, linked to the introduction of practical assessments in the A level examinations, will facilitate practical learning and assessment of skills. Where possible, schools which are close together will share workshop/laboratory facilities, including sharing between public and private schools.

To reduce the shortage of qualified graduate teachers, additional pathways for entry into the teaching profession will be devised such as one year PGCE/PGDE at KIE for non-teaching graduates in subject areas such as maths, physics, biology, chemistry, sociology and economics. This can include open and distance access to such qualifications. This will be backed up by extending the student loan scheme for KIE and CoE students as well as introduction of incentive measures to attract their graduates into the teaching profession such as loan repayment waivers. In addition the capacity of KIE and CoEs, particularly Rukara, will be increased to absorb more graduate trainees.

PBE institutions will improve their income-generating potential as part of encouragement of entrepreneurial skills. Directors of upper secondary schools will be given further management training in order to improve their management skills and business approach. A further strategy will be to encourage more private provision for those who can afford it, to take pressure off the public system. At the same time construction of upper secondary classrooms in public and grant-aided institutions will be re-started to support the expansion of student numbers.

3.3.5 Teacher education

Access and retention – The number of qualified teachers in 2009 was 29,810 for primary and 5,773 for secondary. In 2009, there were a total of 4,031 student teachers enrolled in primary TTCs, 528 in CoEs and 4,396 in KIE. Meeting the increased expansion of lower secondary will require an additional 700-900 lower secondary teachers to be trained per year. This will require a rapid expansion of the capacity of CoEs to produce teachers. There will also be a need for training more upper secondary teachers as 9YBE leads to higher transition rates to PBE.

Quality - High quality teacher training is essential for delivery of high quality education. 97% of public primary teachers are qualified, whereas just 48% of public secondary teachers (lower and upper) are qualified at the appropriate level. However, the TTCs are essentially upper secondary schools with a teacher training stream within them. The quality of programmes is acknowledged to be poor, and is likely to remain so without a substantial amount of support. There needs to be greater emphasis on learner-centred pedagogy in both pre-service and in-service teacher training. The teacher training institutions should be models of good practice for their students, but many of the trainers are not well-versed in appropriate pedagogical approaches. The training programme often does not include areas such as handling information about reproductive health and HIV and AIDS prevention.

Relevance - While there is no shortage of students entering teacher education programmes, too few trainees go on to enter the teaching profession. Of those who do, many leave the profession within 5-10 years. Evidence shows that increasing the proportion of school-based teacher training and in-service training generally has a positive impact both on the quality of teaching

and also retention within the profession. Upgrading unqualified or under-qualified teachers already committed to teaching, for example through ODeL, is also more efficient than pre-service training programmes which result in few practising teachers.

Management and finance – REB’s Teacher Development and Management agency has overall central responsibility for the management and development of the teacher workforce in collaboration with districts, schools and communities. The three levels of teacher education (TTCs, CoEs and KIE) are currently managed independently of one another, although KIE has a specific role in the supervision of the CoEs. This makes coordination and consistency of approach between different levels a challenge. Teacher education institutions, as with all PBE institutions, need to be more business-like in character and management style, with an acceptance of the need to generate some of their own income. In addition, there is need to ensure an effective HIV and AIDS workplace policy is available and implemented to provide treatment, care and support to teachers and their relatives.

Strategic Priorities

Recruitment and Management

The Teacher Development and Management policy will be implemented in respect of a number of strategies to ensure adequate recruitment into teaching and to improve teacher retention. More emphasis will be given to attracting motivated and competent individuals who want to teach. This will be done partly by using a National Service Approach to provide A2 or A0 holders an opportunity to work as teachers for a year, and partly by targeting non-teaching graduates for entry into the profession through one year PGCE/PGDE courses. Provision of teacher education in the different locations will be rationalised: places at some TTCs will be increased by phasing out lower secondary options, and expansion of capacity will take place at KIE and Rukara CoE. A bonding scheme will also be introduced linked to a student loan scheme for KIE, CoE and TTC graduates.

The strategies also include rationalisation of the teacher training budget based on demand for teachers, development of continuous professional development plans, teacher appraisal and mentoring. An electronic National Teacher Registration System will be developed to improve assessment of demand against supply, including monitoring output against placement, transfers, remuneration, and social security. In order to improve retention and transition into teaching, REB’s Teacher Development and Management agency will introduce a placement system so that teacher trainees will know where they will be working at the end of their training.

To support the retention and well-being of teachers, an HIV/AIDS in the Workplace policy will be developed and implemented to safeguard their jobs, and provide access to care, treatment and support for those infected and affected.

Professional Development

The responsible REB agency will implement the Teacher Development and Management policy proposals for a revised pattern of teacher training and certification, which stipulates that in the long term all primary teachers will complete upper secondary education before moving on to teacher training. This approach will be phased in over several years to ensure that there is no dip in teacher supply. New primary and lower secondary teacher trainees will be required to complete a 2-year probation period in schools before receiving a full teaching licence.

The professionalism of primary and lower secondary teaching will be strengthened through development of an accreditation process for all teacher colleges, including the rationalisation of the Primary TTC structure. Along with the Colleges of Education (CoE), the Primary Teacher Training Colleges (TTCs) will be affiliated to KIE which means that TTCs examinations will be delinked from the Secondary Schools Leaving Examination, and required to meet the validation

and accreditation requirements of the National Council for Higher Education. Review and harmonisation of the teacher education curriculum and nature of the certificates offered at all levels will be carried out. In addition, a teacher professional pathway (A2 > A1 > A0) will be implemented with the long-term goal of establishing teaching as a graduate profession. The curriculum will include approaches on how to handle messages about reproductive health and HIV and AIDS prevention and other diseases.

KIE will work with the CoEs and TTCs to incorporate learner-centred pedagogical approaches into the teacher training curriculum, emulating these approaches in their own teaching practices. The KIE training of trainers programme will be monitored in terms of pedagogical skills and expanded to ensure all CoE and TTC college lecturers undergo this training. Pre-service teacher training will also ensure that new teachers are confident and proficient in ICT and English language. The general improvement in access to textbooks (see section 3.2.3) and greater availability of online materials will support learning. REB will also establish a teacher education curriculum and assessment framework based upon core principles and competencies of effective teaching.

MINEDUC will commission the development and costing of an integrated system of both INSET and Continuing Professional Development (CPD) for all teachers to ensure that teachers are able to meet agreed planning, teaching and learning competences; improve their knowledge of English language and its use in the classroom and curriculum; monitor and assess pupil learning; and record and report progress. MINEDUC will commission the design of a quality system of teacher upgrading using a range of delivery modes, including ICT, ODeL and the media, and subsequently implement it. It will also set up systems which will ensure that all INSET and selected CPD training is linked into a modular Credit Accumulation Scheme, that leads towards improved qualifications from certificate to diploma to degree level.

Teacher Motivation and Incentives

Primary teacher salaries will be reviewed with the objective of lessening the increasing gap between the buying power of primary school teacher salaries and of those of other teachers in the sector. Further, MINEDUC through TSC will regularly review minimum standards for teachers' work and living conditions; review workload and class sizes, introduce activities designed to encourage public recognition of teachers and improve school and classroom facilities. Action will also be taken to professionalise teacher placement and mobility by introducing open and accountable application and selection procedures for all posts. A comprehensive teaching service contract will be developed of which the Teachers' Licence will form a part. The Rwanda Teachers' Service Contract will be a legally binding document signed by the TSC and/or its delegated entities, and the employee. A teacher code of conduct will be established defining a set of minimum teaching standards and teaching competencies, including a statement of ethical and pedagogical goals which support the provision of quality education.

Income-generating schemes such as the Umwalimu Savings and Credit Cooperative Organisation (Umwalimu SACCO – see section 2.3.2) will be supported and expanded. The Government established the Umwalimu SACCO in 2007 and provided RWF 1.2 billion for the acquisition of fixed assets and to fund other start-up costs, with the aim of providing teachers with subsidised credit which is to be used primarily for income-generating activities. Currently, 82% of teachers are members.

3.3.6 TVET

Access and retention - In 2009 37,804 graduates from basic education entered technical and vocational education, with a total enrolment of 10,427 students in public technical schools (ETOs) and Integrated Regional Polytechnic Centres (IPRCs). In that year 18,055 of these students were studying professional and commercial subjects such as accountancy and business, with a further 13,910 students enrolled in industrial technical courses and 2,553 in

agricultural and veterinary courses. TVET has benefited from recent investment in infrastructure with the development of two IPRCs, with three more planned. But many TVET institutions still lack adequate resources and up-to-date equipment.

In addition there are a small number of vocational training centres which aim to meet the needs of students who have failed to complete or enter lower secondary education. In 2008 there were 62 such centres (35 of which are privately managed), enrolling approximately 8,000 students. As completion of 9YBE by almost all students is achieved, and as employers seek to employ people with secondary education, the minimum entry to TVET will be basic education. But as long as there are people who have not obtained secondary education or did not finish primary school, the TVET system will continue to train them.

Quality - Teachers and instructors in TVET have also often had inadequate pedagogical and technical training, with just under two-thirds of teachers in technical schools being qualified. The WDA has already started to address this issue, but there is much that needs to be done. A further challenge is that technical teachers often leave the teaching profession to enter the private sector, where similarly qualified professionals can earn salaries 3-4 times higher. In order to remain demand-driven TVET institutions need to respond to changes in technology and innovations in industry. This in turn requires strong links to corresponding industrial sectors, investment in up-to-date equipment and teaching materials, and adequate practical experience and assessment.

Relevance - Because providing TVET is substantially more expensive than the provision of general education, it is especially important that TVET graduates acquire skills that ensure their employability. As the economy becomes more sophisticated and dynamic, TVET graduates will increasingly need to have general business or 'catalytic' skills (see section 3.3.2) in for example the areas of ICT, communication (language, business, interpersonal), problem solving and critical thinking in addition to particular vocational and technical skills. TVET institutions will need to ensure adequate coverage in their programmes of these skills.

Management and finance - TVET institutions in particular should provide models of entrepreneurship for students, but in practice management capacity is often low. Directors and principals require further management training and adequate remuneration to improve the efficiency of management. Currently PBE institutions suffer from insufficient teaching facilities and equipment, but there are opportunities for institutions to exploit partnerships with the private sector to hire out facilities and equipment so as to generate income. The cost of educating a student in a TVET institution is more than twice as high as educating the same student in a general upper secondary school or TTC. There is potential in the education and training sector to mobilise resources using a levy system and further exploration as to the feasibility and cost-effectiveness of such a system will be undertaken.

Strategic Priorities

There will be an expansion of the TVET system taking into consideration the demand for its graduates and also the capacity of the system to deliver quality training. The focus of TVET expansion will therefore be providing high quality demand-driven training. Rationalisation of the TVET system will in part be achieved through the establishment of further Integrated Polytechnic Regional Centres, and incorporation of different levels of training institutions (vocational training centres and ETOs), into an integrated and flexible qualifications system allowing for movement between the various levels. Adequate resourcing for the different institutions will be addressed.

TVET teachers and instructors will be provided with opportunities for pedagogical training. This will be delivered through short courses and/or open and distance learning. The longer term aim will be the professionalisation of the TVET teaching force. WDA will take over the

quality assurance responsibility for TVET from the former General Inspectorate of Education. In consultation with other stakeholders from the public and private sectors, WDA will also develop a national qualifications framework including setting quality standards.

TVET providers will increase student and teacher exposure to the workplace through internships, work placements and industrial visits in order to ensure that teaching and skills are up-to-date. In order to strengthen links to the labour market, private sector representatives will be included on TVET governing boards. The WDA will prioritise TVET curriculum development to ensure courses are aligned with labour market needs.

TVET institutions will be required to be models of entrepreneurship for students, including incorporating business practices in financial management. Institutions will be expected to develop strategic plans which will include targets for income generation. A training programme for principals of TVET institutions will be introduced in order to improve their management skills and business approach. In collaboration with MINECOFIN, MIFOTRA and employers' representatives a feasibility study will be conducted to assess the potential for implementing a PBE levy system for education and training.

3.3.7 Higher education

Access and retention - The number of HLIs has grown considerably in recent years. There are now a total of 28 institutions operating countrywide: 8 public institutions, 5 colleges of nursing, 2 colleges of education, and 13 private HLIs⁹. In 2009 there were 55,213 students enrolled in higher education, over half of whom (52%) were enrolled in private institutions. Of publicly funded students a majority (56%) were studying sciences, whereas students in private institutions tend to study arts, humanities and social science subjects. More female students are enrolled in private rather than public HLIs, 53% and 33% respectively. This is significant because close to all students in private institutions are studying arts, languages, humanities and social sciences which means that there is a gender discrepancy with regard to access in the science and technology fields.

Quality - The National Council for Higher Education (HEC – see section 2.3.2) is the independent body mandated to ensure quality standards in higher education, through audit of public institutions and accreditation of private institutions. Rapid expansion of the higher education system has to date been supported by significant numbers of expatriate teaching staff but these numbers have been reducing, while at the same time it is becoming increasingly difficult to retain national staff as evidenced by the high staff turnover rate. The national quality assurance and improvement system across higher education needs to be strengthened. The challenge is to implement quality systems that ensure that Rwanda meets international standards in curriculum, research, knowledge transfer, and teaching and learning in higher education.

Relevance - The overarching mission of the higher education sub-sector is “to provide quality higher education programmes that match the labour market and development needs of Rwanda for graduates who are capable of contributing to national economic and social needs and who can compete on the international labour market...”¹⁰. Around half of all university graduates in the workforce are employed by the public sector, which might be an indication that the skills currently acquired through higher education are more relevant for public sector than for private sector employment. The links between HLIs and employers have been inadequate and this will need to be addressed more directly. In order to remain demand-driven and allow HLI graduates to drive innovation in the private sector, HLIs need to respond to changes in technology and innovations in industry. This in turn requires HLIs to absorb up-to-date knowledge and adapt it

⁹ Although IPRCs offer diplomas, they are included in TVET and therefore do not appear in this list.

¹⁰ Higher Education Policy, 2008

to the Rwandan context, maintain strong links to corresponding industrial sectors, invest in up-to-date equipment and teaching materials, and provide adequate practical experience and assessment.

Management and finance – The public higher education institutions – National University of Rwanda (NUR), Kigali Institute of Science and Technology (KIST), Kigali Institute of Education (KIE), Higher Institute for Agriculture and Livestock (ISAE), School of Finance and Banking (SFB) and Umutara Polytechnic (UP) – manage themselves relatively autonomously and each has its own strategic plan. For funding purposes, unit costs of programmes are currently differentiated only between arts and science, which does not take into account the different costs of specialised science and technology courses. A further study into the unit costs of different courses needs to be undertaken to address this. As the SFAR student loan scheme provides loans to HE students based on these standard unit costs the loan amounts will then need to be revised. The overall cost of higher education in Rwanda remains relatively high (25% of education budget in 2009/10) demonstrating a need for further cost-recovery mechanisms, public-private partnerships and income generation activities.

Strategic Priorities

As each institution is responsible for developing and implementing its own strategic plan it is less easy to generalise in this sub-sector than in others, although the institutional strategic plans fall within the broader HEC strategic plan.

All public HLIs will expand access to higher education through the use of ODeL and ‘virtual campuses’, and MINEDUC is considering establishing an institute with specific responsibility for promoting and facilitating ODeL. REB’s student financing agency will continue to provide incentives which encourage students to study science and technology subjects and education: the public HLIs will concentrate expansion in this area, allowing the private sector to continue to support arts, humanities and social sciences. On the other hand, HEC will seek to rationalise provision to avoid duplication and wasted resources where institutions offer similar programmes.

In order to strengthen links to the labour market and ensure courses are tailored to skills needs, an employer satisfaction survey will be undertaken, and HLIs will be expected to include private sector representatives on their boards of directors and curriculum review panels. HLI students will also be encouraged to obtain work experience through enhanced access to internships, work placements and industrial visits, facilitated by careers guidance offices. The timing and integration of these into specific courses will take into consideration the need to avoid excessive pressure on businesses to accommodate students during HLI vacation periods.

The increased focus in upper secondary on ‘catalytic’ skills (section 3.3.2) and the move to a more learner-centred approach will in the longer term provide a level of independent thinking and higher expectations which will facilitate efforts to improve quality and relevance. The initiative launched by the Rwanda Development Board to establish careers centres in the HLIs will also contribute to this.

HLIs will be required to be models of entrepreneurship for students, including incorporating business practices in their own financial management, and most of the institutions already do this to some extent. As part of their strategic plans, universities will be expected to increase the extent to which they supplement their public funding through income-generating activities (consultancy, research etc) and through seeking additional partnerships with international agencies and the private sector. A common problem for HLI income-generating activities is that projects are restricted by lack of short-term cash flow for initial costs. The potential to facilitate a commercial loans scheme for HLIs to address this problem will be investigated. HEC and the

REB student financing agency will review the unit costs of HE courses in order to provide a greater degree of differentiation and a more realistic cost basis for decision making.

Working with REB's student financing agency and with HEC, MINEDUC will seek to increase investment in postgraduate study to develop national capacity of university staff in order to reduce reliance on expatriates. There will be a more focused continuous professional development programme for lecturers, including through ODeL and an emphasis on encouraging research in areas relevant to Rwanda.

Further details of the strategies for HE are in HEC's Strategic Planning Guidelines for Public and Private Sector Higher Education Institutions and in the strategic plans of UNR, KIST, KIE, ISAE, SFB and UP as well as of the private HLIs.



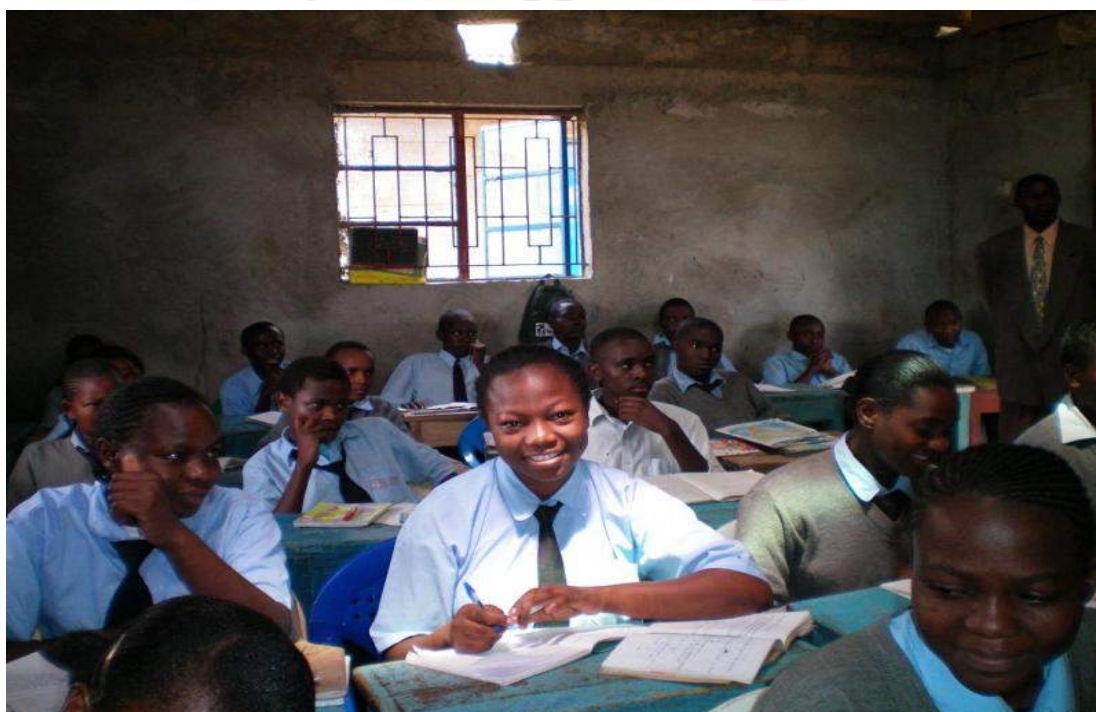
Learning by doing....

Chapter 4: Logical Framework

This chapter contains two tables:

The **Logical Framework** (logframe) for the ESSP is a means of summarising the key targets which the Ministry intends to achieve through implementing the Plan. There are seven main Outputs, which reflect the seven Priority Areas shown in section 1.7 above. Against each of these Outputs are a number of measurable indicators. The three middle columns show the current situation and the Ministry's targets for 2012 and 2015. A further column shows where the data are to be obtained to verify progress against these targets, and the final column shows any key assumptions which have been made and which need to be taken into consideration when assessing progress.

The **Priority Policy Actions Matrix** shows the actions required by the EDPRS Common Performance Assessment Framework (CPAF) to 2012/2013. The six areas in the matrix reflect the areas which the Government considers key to measuring progress against its broader economic development and poverty reduction goals. The Logical Framework is consistent with the CPAF, but as the present EDPRS only covers the period to 2012/13, the Logical Framework has additional targets to be achieved by 2015.



Secondary school students at a school in Kigali

4.1 Logical framework

GOAL: A knowledge economy based on a skilled workforce that can compete in the region and the wider international arena						
	INDICATOR	BASELINE (2009)	TARGET 2012	TARGET 2015	MEANS OF VERIFICATION	ASSUMPTIONS
PURPOSE: Equitable access to quality education that provides opportunities of livelihoods for all Rwandans						
OUTPUT 1: Equitable improved completion and transition and reduced drop-out and repetition in basic education						
	Gross and net enrolment rates (M/F): a) pre-primary b) primary c) primary GER d) lower secondary GER	Total M/F 13.3% n/a 92.9% 91.7%/94.1% 127.3% 129.4%/128.4% 34.6% 34.9%/34.4%	Total M/F 15% 15%/15% 95% 95%/95% 115% 115%/115% 80% 80%/80%	Total M/F 20% 20%/20% 98% 98%/98% 100% 100%/100% 97% 97%/97%	EMIS EICV Census	Expansion continues by both public and private providers. Primary GER continues to measure the proportion of children aged 6-12.
	Completion rates (M/F): a) primary b) lower secondary	Total M/F 74.5% 70.6%/78.5% 91.9% 93.0%/90.9%	Total M/F 82% 82%/82% 94% 94%/94%	Total M/F 90% 90%/90% 96% 96%/96%	EMIS	Expansion continues by both public and private providers
	Transition rates (M/F): a) lower secondary b) general upper secondary and TVET c) TVET institutions	Total M/F 88.0% 89.9%/87.3% 86.0% 85.2%/86.9% 39,191 57.3%/42.7%	Total M/F 92% 92%/92% 70% 70%/70% 52,923 50%/50%	Total M/F 95% 95%/95% 80% 80%/80% 72,797 50%/50%	EMIS REB/RNEC WDA	Expansion continues by both public and private providers. Completion 9YBE will put pressure on upper secondary, more 9YBE leavers will go into TVET
	Drop-out rates (M/F): a) primary b) lower secondary	Total M/F 15.2% 15.6%/14.7% 6.0% 6.5%/5.4%	Total M/F 11% 11%/11% 5% 5%/5%	Total M/F 9% 9%/9% 4% 4%/4%	EMIS	Measures on community and parent sensitisation continue

	Repetition rates (M/F): a) primary b) lower secondary	Total M/F 15.3% 15.7%/15.0% 6.6% 6.3%/6.9%	Total M/F 12% 12%/12% 6% 6%/6%	Total M/F 10% 10%/10% 5% 5%/5%	EMIS	Quality of teaching improves
OUTPUT 2: Equitable improved educational quality and learning achievement						
Basic education	% of pupils passing national S3 exam	Total M/F 80.9% 55.8%/44.2%	Total M/F 85% 85%/85%	Total M/F 90% 90%/90%	REB/RNEC	
	Textbook:pupil ratio	2:1	2:1	1:1	EMIS	Ratio will not improve until replacement of French medium books by English medium is completed.
	Primary pupil:classroom ratio	70	69	63	EMIS	
	% of teachers inspected who during school inspections use learner-centred teaching methods	60%	70%	80%	REB/IGE	
PBE	% of students who pass national exams above minimum mark and receive leaving certificate in upper secondary S6	Total M/F 88.6% 55.6%/44.4%	Total M/F 90% 90%/90%	Total M/F 95% 95%/95%	REB/RNEC	
	% of TVET students passing the final exams	83.2%	86%	90%	REB/RNEC	
	% of institutions accredited in: TVET HLI (private)	96.3% 89%	100% 100%	100% 100%	WDA HEC	

Adult Literacy	% of the population who are literate: Total Kigali Urban Rural	(2005 baseline data) Total M/F 63.0% 66.8%/59.2% 78.0% 78.2%/77.6% 76.5% 78.3%/75.0% 60.0% 64.4%/55.7%	Total M/F 75% 75%/75% 85% 85%/85% 82% 82%/82% 70% 70%/70%	Total M/F 90% 90%/90% 93% 93%/93% 92% 92%/92% 88% 88%/88%	EICV	
OUTPUT 3: A sufficient number of skilled and motivated teachers, trainers and lecturers						
Basic education	Pupil:primary qualified teacher ratio	63:1	56:1	47:1	EMIS	
	Primary teacher attrition rate	7.4%	6%	4%	EMIS	
	% of primary teachers achieving required English proficiency grade	15%	50%	85%	REB/TSC	
Post-basic education	% of (lower and upper) secondary teachers achieving required English proficiency grade	10%	40%	75%	REB/TSC	
	% of TVET trainers who are qualified	69.1%	80%	100%	WDA	
	Proportion of HLI lecturers with at a least - Masters (for undergraduate courses) -PhD (for post-graduate courses)	40.6% 19.7%	60% 40%	80% 50%	HEC	
OUTPUT 4: Equitable post-basic education system tailored to meet labour market needs						

Access increased	Gross enrolment rates: Upper secondary Total student population in : TVET (public and private) TTCs CoEs KIE HLIs (public and private)	Total M/F 16.9% 18.4%/15.4% 39,191 57.7%/42.3% 4,150 N/A 528 74.3%/25.7% 5,496 66.3%/33.7% 53,424 67.5%/32.5%	Total M/F 25% 25%/25% 52,923 55:45 6,797 - 1,262 70:30 6,138 60:40 68,850 60:40	Total M/F 51% 51%/51% 72,797 50:50 8,434 - 1,800 60:40 7,192 55:45 86,159 55:45	EMIS WDA REB/TSC HEC	Extra teaching space will be provided
Demand driven	Proportion of employers who are satisfied with the performance of graduates: TVET	Baseline survey ongoing (2010)	Baseline + 5%	Baseline + 10%	WDA employer satisfaction survey HEC	Survey carried out
	% of institutions with careers guidance centres: Upper secondary TVET HLIs	0% 11.4% 90%	30% 30% 95%	80% 50% 100%	RDB WDA HEC	
	% of graduates in formal employment: Upper secondary TVET HLIs	Baseline household survey being undertaken to cover graduates from all of upper secondary, TVET and HLIs	Baseline + 5% Baseline + 5% Baseline + 5%	Baseline + 10% Baseline + 10% Baseline + 10%	NISR Household survey	Need to ensure relevant question included in Household Survey
OUTPUT 5: Improved HIV/AIDS prevention at all levels of education and training						
	Key HIV and AIDS messages integrated across BE and PBE curricula	0	50%	100%	REB/NCDC/IGE	CNLS Support

	Comprehensive HIV/AIDS in the Workplace policy established and implemented by 2012	0	100%	100%	EMIS/DHS	Support from CNLS			
OUTPUT 6: Strengthened performance in and application of science and technology									
ICT access and connectivity	% of educational institutions with access to computers:	31.9%	50%	75%	EMIS				
	Primary schools Secondary schools	83.9%	90%	100%					
	% of educational institutions with internet connectivity in:	3.7%	25%	40%	EMIS				
	Primary schools Secondary schools	24.5%	35%	50%					
Science/technology	% of schools with the required science facilities (kits, corners, laboratories) Secondary schools	23.4%	40%	60%	EMIS	EMIS questionnaire will be adapted to include science facilities			
	Number of students enrolled in science and technology fields at:	Total	M/F	Total	M/F	Total	M/F	EMIS REB/RNEC HEC	
	Upper secondary	11.4%		35%		40%			
	TVET (technology)	33.2%		60:40		55:45			
	CoEs	71.8%/28.2%		40%		50%			
	HLIs	64.6%		70:30		60:40			
		74.5%/25.5%		64.6%		64.6%			
		27.2%		65:35		50:50			
		79.0%/21.0%		33%		38%			
				75:25		65:35			

	% of students in science streams taking S6 national exams who pass with a minimum for public university entrance to study a science discipline: a) General b) Technical/vocational	F/M 9%/19% 1%/3%	F/M 12%/22% 3.5%/5.5%	F/M 20%/32% 9%/12%	REB/RNEC	
OUTPUT 7: Strengthened institutional framework and management capacity for effective delivery of education services at all levels						
Basic education	% of primary/secondary schools with functional PTAs	62.5% primary 84.1% secondary	100% 100%	100% 100%	EMIS	
	% of schools complying with financial procedures for use of capitation grants	65%	75%	90%	MINEDUC, MINECOFIN	Public Expenditure Tracking carried out on regular basis
	% of Districts meeting education targets set in District Development Plans	78%	85%	93%	MINALOC	
Post-basic education	% of secondary schools with functional - PTAs - PTCs	80% 78%	90% 90%	100% 100%	MINEDUC, WDA HEC	
	% of ETOs with functional - PTAs - PTCs HLIs with functional Boards, academic senates and Management Committees	81% 80% 90%	92% 92% 100%	100% 100% 100%		

4.2 Priority policy actions matrix

The following matrix shows the actions required by the EDPRS Common Performance Assessment Framework (CPAF) to 2012/2013.

EDPRS CPAF Priority Indicator	Policy action	2009/2010	2010/2011	2011/2012	2012/2013
1 Primary school completion rate	Ensure classroom construction, qualification and motivation of teachers and provide textbooks with pupil textbook ratio of 1:1 in core subjects to ensure completion rate	<p>Awarded textbook status given to publishers for up to 4 textbooks per subject G1-G12</p> <p>Number of schools with textbook selection committee established; primary 1926/2408; secondary; 1159/1449</p> <p>250 textbook evaluators trained</p> <p>Develop and cost Special Education Needs strategic plan</p>	<p>Put in place MLA to measure quality of education</p> <p>Make EMIS Operational at District level and in schools with electricity</p> <p>Organise an international workshop on quality and equity</p>	<p>Evaluate the distribution and Utilisation of textbooks</p> <p>Evaluate the use of EMIS at all levels</p>	M&E system fully functional
2 Primary school completion for girls	Launch actions to promote girls' enrolment and learning achievement	<p>Core gender sensitive indicators available</p> <p>Girls' education policy disseminated to every district including awareness raising workshops with relevant stakeholders including NGO, FBO and school administrators</p>			
3 Primary school pupil to qualified teacher ratio	Provide sufficient and properly qualified and well motivated teachers	<p>Deputy CEO for TDM appointed under the Rwandan Education Board</p> <p>Guidelines for INSET of teachers developed</p>			
4 Transition from basic education (TC) to upper secondary education	Expand post-basic education (including upper secondary, TVET and HE)	<p>LTSFF and ESSP revised including costing of post-basic education programmes</p> <p>Roll out EMIS to districts and prepare school based roll out</p>			

EDPRS CPAF Priority Indicator	Policy action	2009/2010	2010/2011	2011/2012	2012/2013
5 Proportion of employers who are satisfied with the performance of TVET graduates	<p>Ensure TVET strategic policy and plan to indicate which new courses/schools to be established and which courses to be improved/ expanded to accommodate more students in response to market demand</p> <p>Conduct employers' survey</p>	<p>Develop and cost TVET strategic plan</p> <p>Conduct employers' survey to establish baseline information on employment of TVET graduate and adequacy of training (Workforce Development Authority)</p>	<p>Develop a TVET National Qualification Framework</p> <p>Develop TVET competency-based curriculum for priority trades</p>	<p>Conduct follow up survey on employment of graduates and adequacy of TVET training (Workforce Development Authority)</p>	<p>Carry out Impact evaluation of TVET on economic development</p>
6 Percentage of STI integration action plan implemented	<p>Strengthen policy coordination capacity to ensure STI is included in sectors and targets are achieved</p> <p>Establish NCSTI to fund STI initiatives in universities, private sector and research networks</p>	<p>Establish the Directorate of Science, Technology and Research with organisational design and staffing, job descriptions</p> <p>Operationalise NCSTI with statute, and initial work program</p>	<p>Establish a framework for setting and integrating STI targets, monitoring and reporting in priority sectors and begin implementation in one sector.</p> <p>Funding flows in form of grants for research and innovation</p>	<p>Implement the framework for setting and integrating STI targets, monitoring and reporting in a second priority sector. Funding flows in form of grants for research and innovation.</p>	<p>Implement the framework for setting and integrating STI targets, monitoring and reporting in a third priority sector.</p> <p>Funding flows in form of grants for research and innovation.</p>

Chapter 5: Financing Framework

This chapter sets out the expenditure requirements to meet the priorities set out in this ESSP, broken down by education level and anticipated sources of finance from the Government and external sources. The chapter projects a significant financing gap and sets out the implications for resource allocation over the ESSP period.

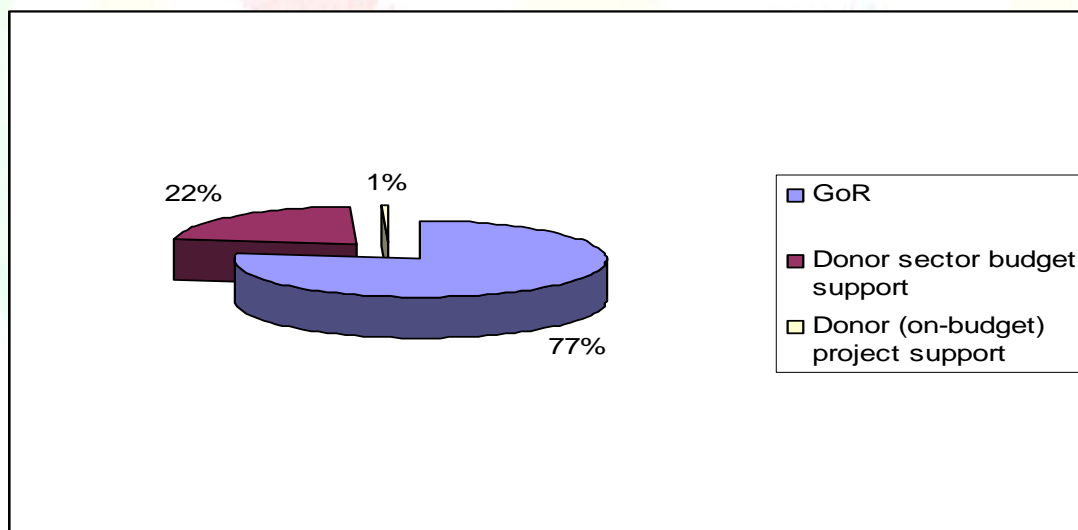
5.1 Financing structure

Funding for education comes from three main sources (current figures in brackets):

- domestic Government revenues (RWF 106,959 million)
- donor Sector Budget Support (RWF 30,167 million)
- donor project support (RWF 851 million)

Some individual learning institutions also generate their own income through fees or income-generating activities. Figure 5.1 illustrates the relative proportions of the three main sources.

Figure 5.1: Sources of funding



Of the Government education funding, around 52% is allocated centrally by MINEDUC, 43% goes directly to districts and schools and the remaining 5% to other Ministries involved in education related programmes (e.g. MINISANTE to fund health education). The Government resources include general budget support from donors, which comprises close to 35%. The financing framework set out in this chapter covers all the revenues and expenditure that are included in the education sector annual action plan. This includes the 95% to MINEDUC, districts and schools, but not funds managed by other Government departments or donor funds that go directly to projects. Off-budget project support was estimated at US\$ 30.1 million for 2009/10.

5.2 Costings

The objectives and strategies outlined in this ESSP are expected to cost RWF 1,572,260 million¹¹ over its five-year implementation (2010-2015). These expenditure requirements are driven primarily by enrolment, with the increase in the education budget linked to the increased number of students the education sector seeks to serve, whilst also recognising the necessary inputs to ensure quality of learning. The growth in budget reflects both the successes of and continuing commitment to universal 9YBE and the anticipated increased demand for post-basic education. The financial projections allow for steady growth of the rate of transition from basic to upper secondary and TVET, then on to higher education. With the higher unit cost per student of post-basic education this is expected to require additional resources. This will be met through increased private sector participation and cost-efficiency measures such as ensuring full teacher utilisation, reducing the proportion of boarding students and more effective use of infrastructure.

Projected education funding allocations increase nine-year basic allocations from 60% in 2009/10 to 66% in 2014/15, as shown in Figure 5.3 and Table 5.3. This accounts for higher volumes of students enrolled in basic education as well as quality improvements. Support for literacy programmes and pre-primary education both see rises between 2009/10 and 2014/15 but remain small components of MINEDUC's budget, both receiving less than 1% of the total budget.

The allocations to upper secondary have improved in recent years and are expected to reach 8% by 2014/15. Funding allocations to TVET have increased from close to 1% in 2007 to 5% in 2014/15 after significant peaks in the 2009 mini-budget, 2009/10 and 2010/11 (linked to the establishment of WDA and significant TVET construction). In the medium term the proportion is projected to remain at approximately 5% of total MINEDUC budget. Allocations to higher education fall as a proportion of total funds (but not absolute value), from 24% in 2009/10 to 14% in 2014/15.

An overview of the relative allocations is shown in Figures 5.2 and 5.3 below. In line with prioritisation of quality 9YBE and the impact of strategies such as introducing English as the medium of instruction and ICT in education, the proportion of funding allocated to 9YBE continues to rise between 2009/10 and 2014/15. Concurrently the proportion allocated to post-basic education falls, largely due to decreases in the relative allocation to higher education (although throughout the period of the ESSP the absolute allocation to higher education continues to rise). Other costs – including pre-primary education, non-formal education and institutional support – remain relatively constant at just under 2% combined.

The above figures all relate only to direct MINEDUC expenditure. In addition, there is significant private sector involvement in the education sector, which is expected to increase over the course of the ESSP with increased contributions from private individuals, corporations and development finance (e.g. IFC). For example, in 2009 61% of upper secondary schools and 2% of higher education students were private, and both these proportions are expected to grow.

The costings are based on currently available data. Unit costs at all levels will be reviewed during the course of the ESSP period.

¹¹ Approximately US\$ 2,673 million (May 2010)

Figure 5.2: Projected sub-sector allocations 2009/10-2014/15

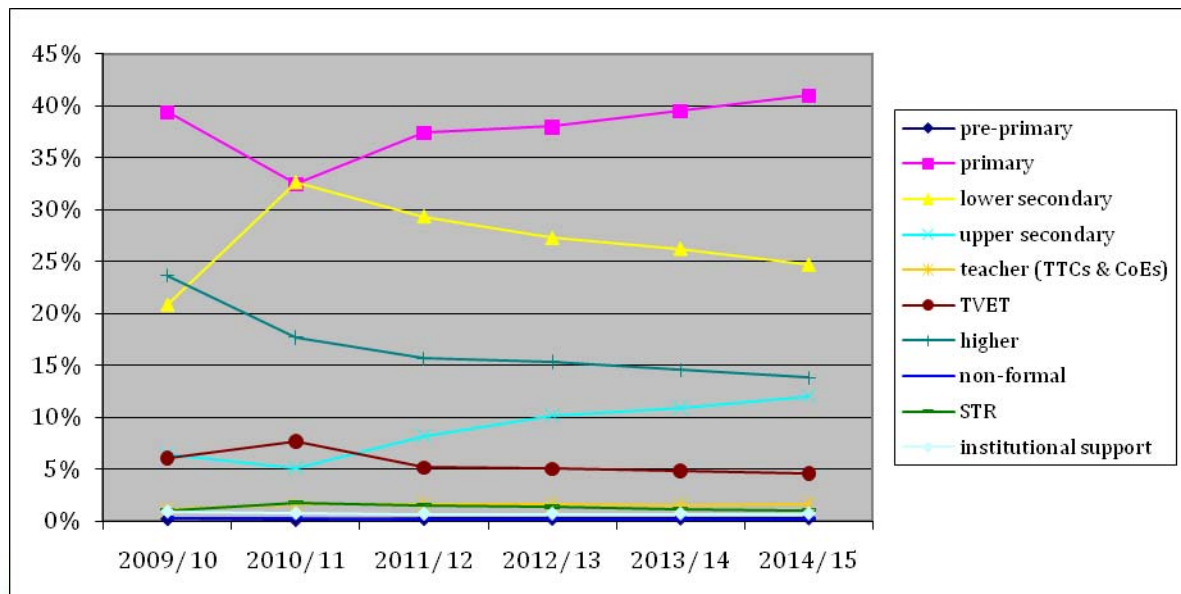
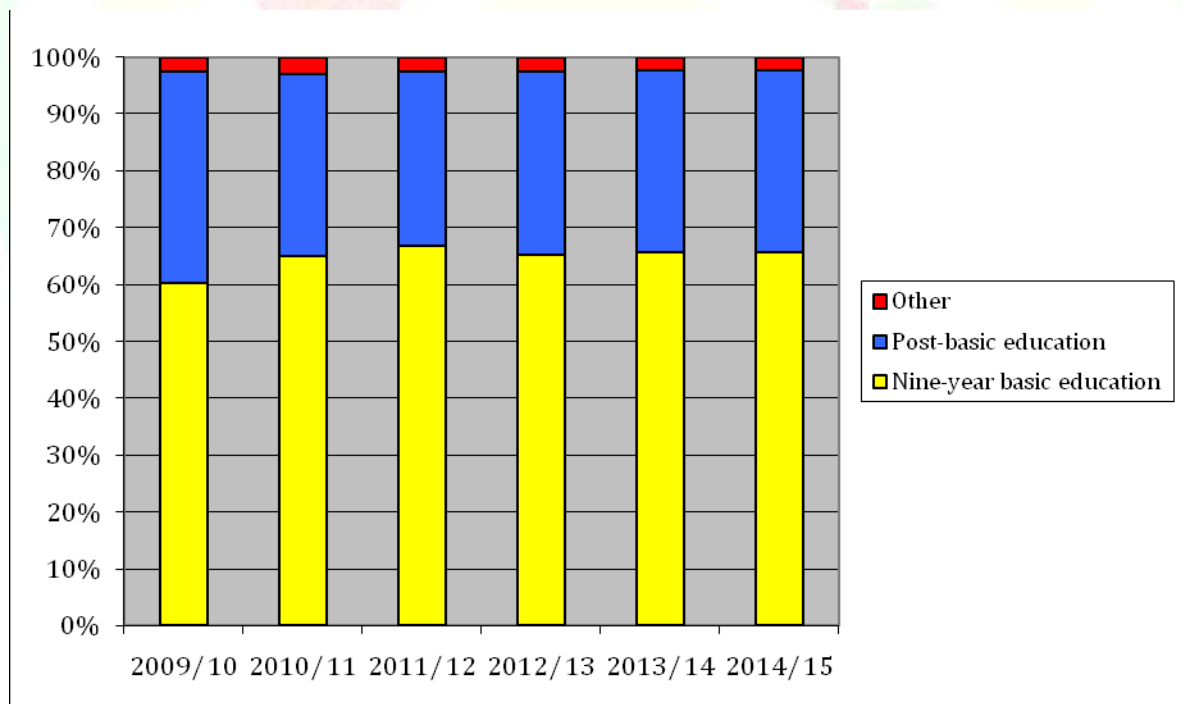


Figure 5.3: Overview of basic and post-basic education funding allocations 2009/10-2014/15



Tables 5.1 and 5.2 present a projected summary of the budget until 2014/15. The financial implications for expansion of post-basic education can be seen by the growth in these budget lines.

Table 5.1 Actual and projected recurrent expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10 - 2014/15)
Pre-primary	299	215	511	646	826	1,050	3,548
Primary	55,809	64,438	85,166	100,119	122,848	150,035	578,415
Lower secondary	24,478	41,658	62,434	72,054	81,443	90,058	372,125
Upper secondary	9,718	10,150	12,146	17,776	26,108	36,173	112,071
Pre-service teacher training	1,480	2,641	3,040	3,474	3,963	4,870	19,468
TVET	7,366	7,731	9,022	10,293	11,696	13,233	59,340
Higher education	33,438	32,493	35,668	39,419	43,724	48,682	233,425
Non-formal	435	458	495	536	580	627	3,130
STR	1,648	3,513	3,618	3,727	3,838	3,954	20,297
Institutional support	1,411	1,507	1,710	2,000	2,379	2,812	11,820
TOTAL	136,083	164,804	213,811	250,044	297,405	351,493	1,413,640

Table 5.2 Actual and projected capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected capital expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Pre-primary	-	-	-	-	-	-	-
Primary	3,810	-	6,490	4,698	4,886	5,081	24,965
Lower secondary	7,076	23,080	9,462	3,205	3,334	3,467	49,623
Upper secondary	-	-	8,004	10,349	9,101	9,465	36,919
Pre-service teacher training	181	465	952	990	1,030	1,071	4,688
TVET	1,816	7,502	3,632	3,663	3,923	4,163	24,699
Higher education	2,241	2,653	2,733	3,020	3,350	3,730	17,726
Non-formal	-	-	-	-	-	-	-
STR	-	-	-	-	-	-	-
Institutional support	-	-	-	-	-	-	-
TOTAL	15,124	33,699	31,272	25,926	25,624	26,976	158,620

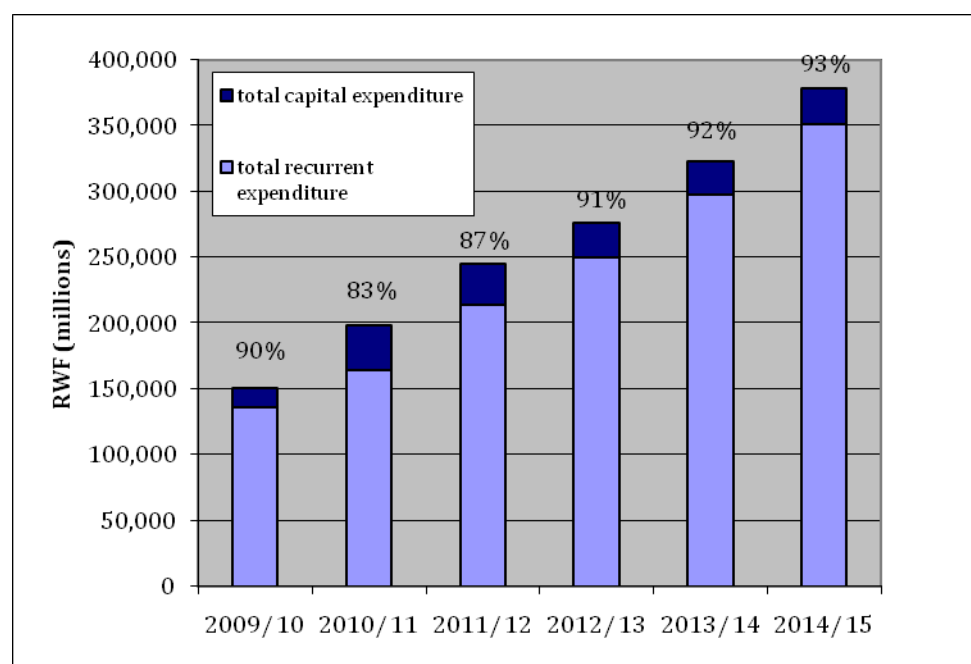
Table 5.3: Actual and projected recurrent + capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent + capital expenditure	2009/10 (Actual)		2010/11 (Projected)		2011/12 (Projected)		2012/13 (Projected)		2013/14 (Projected)		2014/15 (Projected)		TOTAL (2009/10-2014/15)	
Pre-primary	299	0.2%	215	0.1%	511	0.2%	646	0.2%	826	0.3%	1,050	0.3%	3,548	0.2%
Primary	59,619	39.4%	64,438	32.5%	91,656	37.4%	104,817	38.0%	127,733	39.5%	155,116	41.0%	603,380	38.4%
Lower secondary	31,554	20.9%	64,738	32.6%	71,896	29.3%	75,259	27.3%	84,777	26.2%	93,525	24.7%	421,748	26.8%
Upper secondary	9,718	6.4%	10,150	5.1%	20,150	8.2%	28,125	10.2%	35,209	10.9%	45,638	12.1%	148,990	9.5%
Pre-service teacher training	1,661	1.1%	3,105	1.6%	3,992	1.6%	4,464	1.6%	4,993	1.5%	5,941	1.6%	24,156	1.5%
TVET	9,182	6.1%	15,233	7.7%	12,653	5.2%	13,956	5.1%	15,619	4.8%	17,395	4.6%	84,040	5.3%
Higher education	35,679	23.6%	35,146	17.7%	38,401	15.7%	42,439	15.4%	47,074	14.6%	52,412	13.8%	251,151	16.0%
Non-formal	435	0.3%	458	0.2%	495	0.2%	536	0.2%	580	0.2%	627	0.2%	3,130	0.2%
STR	1,648	1.1%	3,513	1.8%	3,618	1.5%	3,727	1.4%	3,838	1.2%	3,954	1.0%	20,297	1.3%
Institutional support	1,411	0.9%	1,507	0.8%	1,710	0.7%	2,000	0.7%	2,379	0.7%	2,812	0.7%	11,820	0.8%
TOTAL	151,207		198,503		245,083		275,969		323,029		378,470		1,572,260	

In 2009/10 recurrent expenditure accounts for 90% of the total education sector, and is projected to rise to 93% by 2014/15: see Figure 5.4. Within recurrent expenditure teacher salaries are the largest area of expenditure, although they still constitute a relatively small proportion of spending when compared internationally. In 2009/10 at primary level teacher salaries represented 33% of total primary expenditure. Expenditure on salaries is projected to rise significantly over the period of the ESSP, becoming 54% of primary recurrent expenditure in 2014/15. Within 9YBE capitation grants form the second biggest category of recurrent expenditure, followed by curriculum development and textbooks. At both lower secondary and upper secondary levels school feeding represents a significant proportion of recurrent expenditure, 8%-12% over the course of the ESSP. However, this proportion is expected to reduce as the proportion of boarding students decreases over time. Capital expenditure for 9YBE reduces significantly from 2012/13, following peaks in construction in 2010/11 and 2011/12.

The expenditure on pre-service teacher training seen in tables 5.1-5.3 only includes the cost of training teachers in Teacher Training Colleges, Colleges of Education and Kigali Institute of Education distance learning courses. Other pre-service training at KIE is captured under the higher education budget line and represents about 10% of this total. Expenditure on in-service teacher training is captured within the figures for primary, lower secondary and upper secondary education. This in-service teacher training expenditure was RWF 1,289 million in the 2009/10 budget, and is intended to rise sharply over the course of the ESSP period to reach RWF 5,958 million in the 2014/15 budget. Furthermore, a significant proportion of the capitation grant is used by schools for the purposes of teacher training.

Figure 5.4: Recurrent and capital expenditure



[Note: Percentages given indicate % of recurrent expenditure]

5.3 Resources

Forecasting available resources over the next five years is very challenging given the current economic climate and the impact it is likely to have in the medium term on domestic growth in

the economy, the capacity, ability and speed at which the private sector might expand (especially in relation to its ability to access credit) and on donor investment. In addition to the uncertainties related to the economic climate, it is difficult to predict the level of donor resources over the period of the ESSP, both because of shorter donor planning horizons and because of potential changes in the division of labour between different donors across a range of sectors within Rwanda.

Assumptions:

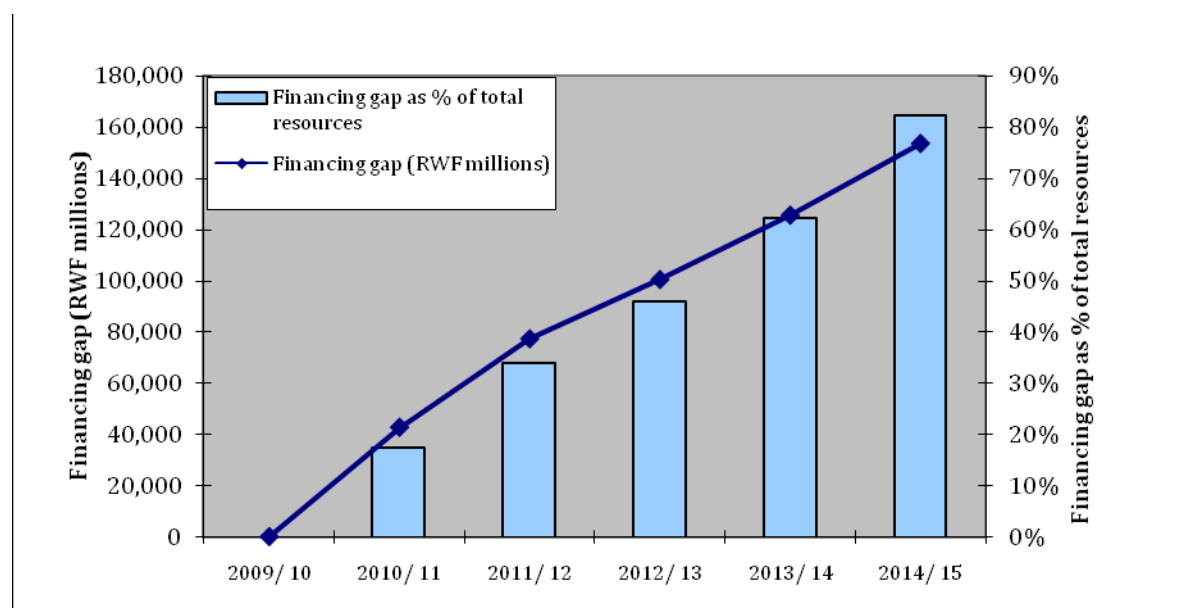
- Real GDP growth of 7.8% per year (until 2012) and nominal growth of 12% (MINECOFIN estimate)
- Share of domestic resources to education to remain close to 18%
- Budget support anticipated to constitute 13% of education resources over the period
- On-budget project support continues to contribute around 1% of education resources

Table 5.4 shows the projected resources available for the education sector. Over the period of the ESSP these total RWF 1,088,192 millions. With projected expenditure requirements of RWF 1,572,260 million this leaves a total financing shortfall of RWF 484,068 million, between 2009/10 and 2014/15. Figure 5.5 shows the predicted annual financing gap. As would be expected the financing gap increases significantly over time, as increased levels of enrolment compound themselves throughout the education system.

Table 5.4: Financial overview 2009-2015 (RWF millions)

	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Expenditure	151,207	198,503	245,083	275,969	323,029	378,470	1,572,260
Recurrent	136,083	164,804	213,811	250,044	297,405	351,493	1,413,640
Capital	15,124	33,699	31,272	25,926	25,624	26,976	158,620
Resources	151,207	163,596	176,834	183,801	198,544	214,210	1,088,192
Domestic resources	120,189	130,488	140,560	147,271	160,335	174,320	873,163
Budget support	30,167	32,048	34,976	35,024	36,412	37,769	206,395
On-budget project support	851	1,061	1,298	1,506	1,797	2,121	8,634
Financing gap (expenditure - resources)	-	34,907	68,248	92,169	124,485	164,259	484,068
Financing gap without external support	31,018	68,016	104,523	128,699	162,693	204,150	699,097

Figure 5.5 Financing gap (2009/10-2014/15)



5.4 Implications and future strategies

Figure 5.5 shows the projected financing gap from 2009/10 to 2014/15. The gap is clearly significant. To meet the projected financing gap MINEDUC will continue to develop partnerships with donors, the private sector, NGOs and FBOs. Efforts will also be made to obtain a further allocation from domestic resources above the assumed level of 18%. In addition MINEDUC and education providers will explore new cost-sharing arrangements, for example training levies, an extension of the student loan scheme and increased private sector participation within post-basic education.

Nonetheless, there is a considerable risk that this gap may not be bridged, calling for prioritisation of funding, at the cost of not fully meeting all of the objectives outlined in this ESSP. The costings used in this framework are based on achieving an ambitious set of policy outcomes, in line with the targets set out in the logframe in section 4.1. This is the preferred scenario. However, two less ambitious scenarios are also set out in the Annex. These would involve smaller financing gaps and are illustrative of what could be achieved with fewer resources.

Given the inherent unpredictability of revenues, there is a need to periodically review spending plans and the MTEF as more accurate information becomes available. This will be done through the annual planning and budgeting process, and the implications for the delivery of the ESSP priorities will be reviewed at the annual JRES (see section 6.1.3). MINEDUC will continue to take steps to improve the accuracy of forecasting through reviewing unit costs and developing staff skill levels in finance and planning both centrally and at a decentralised level.

Chapter 6: Management, Monitoring and Review

This chapter sets out how the ESSP will be managed and explains how performance in delivering the priorities will be monitored and reviewed. It also identifies current challenges in carrying out the management, monitoring and evaluation roles effectively and strategies to improve capacity in these areas. Further details will be set out in the ESSP National Implementation Framework.

6.1 Implementation of the ESSP

6.1.1. Managing the implementation

The Directors General are responsible to the Permanent Secretary for managing the implementation of the Plan. The DGs identify with their teams which parts of the Plan they are responsible for and plan out with them how the objectives will be achieved over the five-year period. Tasks are agreed, responsibilities and human resource needs identified, costs and budgets refined, and detailed work plans are developed within each Directorate. The National Implementation Framework being developed to accompany the ESSP provides a useful tool to support this process, especially in relation to decentralised delivery

Specific accountabilities are determined within each Directorate General. Teams and units report to their DGs quarterly and issues and constraints are identified. The DGs report to the Permanent Secretary on progress and issues arising quarterly and this is the principal internal accountability mechanism.

6.1.2 Annual planning

This ESSP and the National Implementation Framework will serve to guide the formulation of an annual Education Sector Action Plan and a Medium Term Expenditure Framework (MTEF). The annual Education Sector Action Plan covers all the activities carried out by the central administration and its affiliated institutions and agencies (REB, WDA, NCHE, HLIs, etc). Each institution and agency puts forward its draft plans and budget. Districts provide data (student and teacher numbers, school construction requirements) to inform budget planning. MINEDUC leads a process of negotiation and consolidation to produce a costed annual Action Plan which is validated by the MINEDUC management team. MINEDUC then presents the plan to stakeholders (MINECOFIN, development partners) for discussion at the Forward Review meeting held in March. Between March and June, negotiations will continue with MINECOFIN to finalise the budget. The finalised Education Sector Action Plan is agreed by June each year.

As set out in section 2.4, District Education Officers are responsible for formulating district level annual action plans which form part of the wider District Development Plan. The education elements are in line with the priorities set out in the ESSP. Plans are validated by District Education Committees chaired by the Mayor or the Vice-Mayor for social affairs.

A key issue to be addressed is the need for greater coherence between the ESSP, MTEF and the annual planning and budgeting cycle to ensure alignment between resource allocation and strategic priorities.

6.1.3 Monitoring and review

The key monitoring post in MINEDUC is the Professional in charge of Monitoring & Evaluation in the Education Planning Directorate. The Professional is responsible for assisting the Planning Director in the development of a monitoring framework and agreeing the actions and responsibilities for collecting data on progress against the indicators in the logframe (section

4.1). The Director of Planning is responsible for determining what data are collected, how and how frequently, and the EMIS is the main mechanism for storing and accessing the data (see section 6.2.2). Progress will be reviewed by the Planning Directorate and the Ministry's Senior Management Team regularly and adjustments made where necessary. The process of data collection and analysis is evaluated from time to time for effectiveness and relevance and to identify gaps.

The principal review process at the national level is the annual Joint Review of the Education Sector (JRES), which is part of the joint budgets and sectors review process co-ordinated by the Ministry of Finance and Economic Planning (MINECOFIN). This is a systematic review process linked to education sector strategic planning that has taken place on an annual basis since 2003.

The JRES reviews the performance of the whole education sector in terms of policy and planning, implementation, budget execution and progress against the agreed key indicators and targets. The assessment is based on research reports, EMIS and other data, REB Inspection reports, and visits to educational establishments. The Review involves participation of a large range of Government institutions, including ministries, development partners, districts and school officials. It identifies key priorities for the year ahead within the framework of the ESSP and informs policy development and work programmes. A summary report indicating performance against the core education indicators of the Common Performance Assessment Framework is signed jointly by Ministry and Lead Donor, and sent to MINECOFIN.

In addition, Education Sector Working Group meetings of MINEDUC and the sector development partners, held every two months, and the NGO Forum are both mechanisms that enable regular monitoring and discussion of progress with external stakeholders of education policies and strategies. For internal evaluation of performance, regular MINEDUC senior management meetings and specific task forces are set up to review and report on key education initiatives and priorities. At the District level there are regular Joint Action Forums with stakeholders to review the District Development Plans, which include education.

Reporting of activities in the Education Sector Action Plan happens on a quarterly basis. Each institution and agency covered by the Plan reports to MINEDUC. MINEDUC compiles a consolidated annual activity report which is submitted to the Prime Minister's office and published.

Districts and schools are required to provide data for national level monitoring and evaluation. Regional inspectors in every province carry out school inspections, reporting directly to MINEDUC and to the Districts. Further, based on their respective School Improvement Plans and District Development Plans, schools and districts carry out their own self-assessment and monitoring and evaluation of performance against the targets they have set themselves. This includes data that may not be reported to another level but can be used to inform their own planning and strategy development processes. Each school and district is required to draw up their own monitoring framework to support this, with involvement of PTAs and PTCs at school level.

6.1.4 Capacity

Resources for the management of the ESSP at both national and district level are limited but have been increasing. MINEDUC's central administration has 60 permanent staff and each District has one education officer. It has now been agreed that an officer at sector level will be in charge of education in each sector (*umurenge*). High turnover of staff, particularly at District level, has reduced capacity but vacant posts are being filled and there is now a need to focus on training new staff for continuity.

A revised capacity building programme is in place to address the main capacity constraints that will impact on effective management and implementation of the ESSP. This is supported by the Capacity Building Pooled Fund. Priority activities will include intensifying programmes for training at all levels on financial management, planning and programme management, communication and reporting. Clear processes for information flows and coordination between the national and decentralised levels will also be put in place.

MINEDUC has applied to the Public Sector Capacity Building Secretariat for funding for a specific capacity building programme focusing on aspects of change management. This will provide in-house short-course training and coaching to all MINEDUC staff. It also provides for short-term consultancies where necessary. In collaboration with MINALOC, MINEDUC will seek to extend capacity building activities to the District Education Officers.

6.1.5 Risks to achieving the ESSP objectives

This Plan is ambitious and there are inevitably risks to achieving its objectives. These have been taken into account as part of the plan development process, including through a joint risk analysis undertaken by MINEDUC and other education sector stakeholders. The following table summarises the key issues identified in relation to the main priorities (section 1.7).

Risks
General
The main risk to achieving the objectives is that the financing gap (section 5.3) may not be filled and the implementation of the Plan is then under-resourced. A further broad risk is that capacity may be inadequate (or not adequately developed over the five years) whether at the levels of MINEDUC, the Districts or the institutions. Weaknesses in the new EMIS may have distorted baseline data, making targets unrealistic.
1 Improving completion and transition rates whilst reducing drop-out and repetition in basic education
It may not be possible to expand pre-primary sufficiently, or equitably, to provide an adequate foundation for primary. Early literacy may not be developed fast enough to provide the necessary foundation for developing the post-basic transferable or 'catalytic' skills required for employment. Continuing high student/teacher ratios may hinder reducing drop-out rates.
2 Ensuring that educational quality continues to improve
Inadequate quantity or quality of teacher training to meet the needs of introducing English as the medium of instruction may reduce teaching quality. The Inspectorate may not be sufficiently resourced to provide adequate supervision and support at school level. Inadequate budgets and distribution procedures for textbooks may delay plans for increasing textbook/student ratios.
3 Developing a skilled and motivated teaching, training and lecturing workforce
The need to change the pedagogy to meet the shift to a learner-centred approach may be beyond the capacity of teachers. Teachers may be unable or unwilling to teach the 'catalytic' skills required for evolving employment opportunities.
4 Ensuring that the post-basic education (PBE) system is better tailored to meet labour market needs
Management capacity may be inadequate for the necessary harmonisation of PBE, including ensuring links between institutions to avoid inefficient duplication. Changing from a supply mentality to being demand driven may be too much for some institutions. HE institutions may be unable to generate even more of their own funding to ensure quality is maintained.
5 Ensuring equity within all fields and throughout all levels of education and training
The extent of the proposed expansion of SNE provision may be unrealistic. Overcoming the rural/urban divide may be more challenging than foreseen. The introduction of ODeL may be more problematic and require more resources than expected. Health education may not be taken seriously and multi-Ministry responsibilities may result in lack of ownership.

6 Strengthening of education in science and technology

Education in science and technology may not be sufficiently resourced to achieve all the improvements in the science and technology environment in schools, gender equity, training teachers and promotion of research, within five years. There may also be an unrealistic expectation of expansion of access to electricity, which is outside MINEDUC's control.

7 Strengthening the institutional framework and management capacity for effective delivery of education services at all levels

Management skills at decentralised levels may be inadequate. The move to give responsibilities to the administrative sectors may make demands which cannot readily be met.

All of the above risks will be kept under review by MINEDUC and will be monitored in the annual Joint Reviews (section 6.1.3). The financing plan will also be kept under review by MINECOFIN and the development partners, through the Joint Reviews and the annual budget reviews coordinated by MINECOFIN. The Annex sets out alternative financing scenarios should it prove impossible to fill the financing gap. Capacity is addressed within the Plan (section 6.1.4); this will also be reviewed during the Joint Reviews. As the accuracy of data collected through EMIS improves and data from other sources become available (sections 6.2.2 and 6.2.3), targets may need to be adjusted and approved by the JRES.

6.2. Performance indicators and management information

6.2.1. Performance indicators

The logical framework in section 4.1 will serve as a basis for a comprehensive monitoring framework for assessing progress in achieving the priorities set out in this ESSP which will be developed separately along with the Implementation Framework. The logframe is consistent with the vision for economic and social development from the 2008-2012 EDPRS and incorporates the education sector indicators from the Common Performance Assessment Framework (CPAF) (see the note at the beginning of Chapter 4).

While all the indicators set out in the logframe will be monitored, the following will serve as the key performance indicators to be assessed as part of the annual Joint Sector Review process (see section 6.1.3):

Key Performance Indicator	2009 baseline	2015 target
1. Equitable improved completion and transition and reduced drop-out and repetition in basic education		
Primary school completion rate (male/female) (CPAF indicators)	71.3% (67.5%/75.1%)	95% (95%/95%)
9YBE completion rate (male/female)	P: 74.5% (70.6%/78.5%) LS 91.9% (93.0%/90.9%)	P: 88% (88%/88%) LS: 96% (96%/96%)
Transition from basic education to upper secondary education (CPAF indicator)	86.0% (85.2%/86.9%)	95% (95%/95%)
Adult literacy rate (male/female)	63.0% (66.8%/59.2%)* 2005 baseline data	90% (90%/90%)
2. Equitable improved educational quality and learning achievement		
% of students passing National S3 exam	80.9% (55.8%/44.2%)	90% (90%/90%)
% of students passing National S6 exam	88.6% (55.6%/44.4%)	95% (95%/95%)
3. A sufficient number of skilled and motivated teachers, trainers and lecturers		
Primary school pupil to qualified teacher ratio (CPAF indicator)	66.7:1	45:1
% of TVET trainers who are qualified	69.1%	100%

4. Equitable post-basic education system tailored to meet labour market needs		
Proportion of employers who are satisfied with the performance of TVET graduates (CPAF indicator)	Baseline survey ongoing (2010)	Baseline + 10%
5. Improved HIV/AIDS prevention at all levels of education and training		
Key HIV and AIDS messages integrated across BE and PBE curricula	0	100%
6. Strengthened performance in and application of science and technology		
Percentage of primary and secondary schools with internet connectivity	Primary 3.7% Secondary 24.5%	Primary 40% Secondary 50%
Percentage of schools with required science facilities	Baseline survey due in 2010	60%
Percentage of students in science streams taking S6 national exams who pass with a minimum for public university entrance to study a science discipline	General: F 9%/M19% Technical/vocational: F1%/M3%	General: F20%/M32% Technical/vocational: F9%/M12%
7. Strengthened institutional framework and management capacity for effective delivery of education services at all levels		
Percentage of schools complying with financial procedures for use of capitation grants	65%	90%

6.2.2. Management information and data

Access to timely and accurate management data is a pre-requisite for effective monitoring. MINEDUC works with REB, HEC, WDA, the National Institute of Statistics and the Districts to collect qualitative and quantitative management data to inform policy development and to evaluate progress. Districts are responsible for providing data on specific performance indicators based on their own performance and qualitative analysis of performance of schools.

An Education Management Information System (EMIS) has been developed to collect primary source data relating to all education institutions. The EMIS enables MINEDUC to monitor education activities at school, district and national levels, and to aggregate and disaggregate information by various criteria such as enrolment, transition, completion, repetition, drop-out rates, textbook and student/teacher ratios, examination results and teacher qualifications. All authorised education officers at national and district level have access to the data in EMIS which will reduce the need to request information from schools, districts and agencies. Schools will also be able to access information to enable them to measure their performance against other schools. This process will support their school level planning and prioritising.

There are a number of challenges related to information and data flows. An independent review of the EMIS has been undertaken and MINEDUC is considering its recommendations. Issues include:

Data collection. There is a need to ensure data collection systems allow for maximum accuracy and consistency at the point of collection and when data are entered into the system. Progress will be made towards implementing EMIS data entry at the individual school and post-basic institution level to ensure greater reliability, although current limitations to electricity access, connectivity and availability of ICT infrastructure require a phased approach to using the EMIS at school level. MINEDUC will also examine how data collection can be independently verified.

Data coverage and breakdown. EMIS currently covers pre-primary, primary, secondary and higher learning institutions. Data on TVET institutions, other than technical schools, and on adult literacy are not yet covered. The system will be extended to cover all education institutions. The system will be reviewed to ensure that data are included for all the ESSP

indicators. New areas will be added, such as an employer satisfaction survey, where necessary. The extent to which EMIS data can be supplemented by other data sources such as the Labour Market Information System (LMIS) will be examined.

Data access. The system cannot yet be accessed on demand to meet specific requirements for information and this facility will be developed.

Capacity. Training on use of EMIS will be carried out at all levels. Data analysis and presentation skills needs will also be addressed.

6.2.3 Preparing for the future

During the preparation of this ESSP a number of gaps in the data were revealed which has restricted the choice of indicators. Where studies are being undertaken which will provide baseline data in the near future, this has been noted in the logical framework in section 4.1. Other initiatives which are due to start during the period of this plan, such as Monitoring of Learning Achievement (section 3.2.3), will themselves produce data and will become significant tools in the future.

The ESSPs are rolling plans and the Ministry will be building on the current plan to prepare the next one, and will be ensuring that missing data can be obtained. The preparation period for the present plan has also coincided with preparation of other documents, such as the World Bank's Country Status Report, and when these are finalised there will be further sources of data. The evidence base for further planning and monitoring will therefore grow stronger during the lifetime of this Plan.



New teaching and learning materials ready to be used

Annex: Alternative Financing Scenarios

Cost projection model

To make projections of costs in the education sector over the next five years MINEDUC has developed a cost-projection model. The following text aims to provide a simplified overview of its processes.

Stage 1

The first stage of the model is to project enrolment for all levels of education. For the first year of primary education a target for gross entry (new P1 entrants / children aged 7) is used alongside national population projections to estimate newly enrolled P1 students. Enrolment in all other years of primary and secondary education is estimated using baseline enrolment data alongside targets for repetition and promotion at each year of schooling.

Enrolment in TVET, Higher Education, pre-service teacher training and adult literacy programmes are projected using baseline enrolment data and targets for enrolment growth. Enrolment in pre-primary is determined by a target for the gross enrolment ratio along with national population projections.

Stage 2

The second stage of the model is to project teacher, classroom and latrine requirements at each level of education (excluding higher education and adult literacy). The number of new teachers and classrooms required is calculated to meet targets for teacher-pupil and classroom-pupil ratios, taking into account the baseline stock of teachers and classrooms, and projected pupil enrolment. Furthermore, at the primary level teacher and classroom requirements are determined by targets for double-shifting (whereby the same classroom or teacher is used to teach two different classes in the same day). Latrine requirements are determined by the assumption that every new classroom requires two latrines.

For secondary schools, TVET and pre-service teacher training it is also necessary to project dormitory requirements. These are determined by the current number of dormitories, along with enrolment projections and targets for the percentage of students who board.

Stage 3

The third and final stage of the model is to use the enrolment projections and the teacher, classroom and dormitory requirements to project costs for each level of education.

Recurrent expenditure

For primary and secondary education, expenditure on teacher salaries is calculated using the projections for number of teachers and a target for their average salary as a multiple of GDP per capita. Expenditure on capitation grants is calculated using enrolment projections and the average capitation grant per student (estimated as the current amount with a year-on-year inflationary increase for future years). Expenditure on school feeding is calculated equivalently, albeit taking into account the different amounts received by boarding as opposed to day students. All remaining recurrent expenditure is set as a percentage of total recurrent expenditure. This percentage can be altered year-on-year to account for the estimated costs of sub-programmes such as in-service teacher training, ICT and solar panels, science and technology, girls' education, special needs education, curriculum development and textbooks etc.

For TVET and pre-service teacher training, expenditure on teacher salaries is calculated using projections for number of teachers and targets for teacher salaries as a multiple of GDP per

capita. Other non-salary recurrent expenditure is calculated by multiplying a set unit cost by the projected number of students.

Recurrent expenditure for higher and non-formal education are both determined by multiplying a set unit cost by the projected number of students. Pre-primary expenditure is set as a percentage of total primary recurrent expenditure, while institutional support expenditure is set as a percentage of total recurrent expenditure for all the education sector.

Expenditure on stand-alone STR projects (note that much science and technology spending is captured within the budgets for primary and secondary education) is calculated outwith the model by MINEDUC's STR unit, who estimate costs for all individual STR components and then aggregate.

Capital expenditure

Capital expenditure is calculated by multiplying the number of new classrooms, latrines and dormitories to be built at each level of education by their unit cost of construction (which has a year-on-year inflationary increase). In addition, rehabilitation costs are calculated as the number of classrooms and dormitories required to be rehabilitated (set as a target percentage of the classroom and dormitory stock) multiplied by the unit cost for rehabilitation. For Higher Education total capital expenditure is calculated as a unit cost multiplied by the number of students.

Model critique

The model is a strong tool for MINEDUC to project future costs based on planned activities, and it provides a reasonable estimate of the likely costs required to achieve the goals of the ESSP. Indeed a recent team of international consultants hired by MINECOFIN in 2010 to review costing models used in Rwanda particularly lauded the strengths of MINEDUC's model and promoted it as an example for other ministries to follow. Nevertheless, every model is a simplification of reality and as such cannot capture every aspect of likely future costs. While every effort has been made to take into account all the likely costs resulting from the ESSP, MINEDUC recognises the need to regularly update its cost projections as new information becomes apparent. Furthermore, MINEDUC will continue its process of constantly developing and refining this model, particularly to address its limitations in projecting the finer aspects of sub-programme costs. The intention is to increase the complexity and scope of the model without decreasing its usability.

Alternative financing scenarios

The cost projections presented in Chapter 5 are based on the ambitious targets of the logframe in Chapter 4. This is **Scenario 3**. This Annex presents two further scenarios with less ambitious targets which are possible options should the financing gap of the preferred scenario be impossible to bridge. These scenarios are indicative of what the Ministry could achieve even with less funding than ideally hoped for.

Scenario 1 (Annex Tables A1-4) is the least ambitious and thus cheapest option. **Scenario 2** (Annex Tables A5-8) is the medium option. Decreasing the financing gap evidently comes at the cost of not achieving a number of the logframe targets. Table A10 provides a comparison of the three scenarios in terms of their impacts on a selection of indicators. Most of these indicators are also found in the logframe, but a few extra have also been added to help clarify differences between the scenarios.

In both these scenarios reductions in spending are almost ubiquitous across education programmes. Nevertheless, prioritisation of particular programmes and policies is clear with some areas of spending remaining relatively protected.

As seen in Tables A3 and A7 the commitment of MINEDUC to basic education remains strong in both scenarios. In Scenario 2 the percentage share devoted to 9YBE (65.6%) is in fact higher than in Scenario 3 (65.2%), and only marginally lower in Scenario 1 (64.6%). In fact in both Scenarios 1 and 2 the percentage share devoted to primary education is above that for Scenario 3.

The cut in spending for 9YBE principally results in a slowing down of achieving the Ministry's promise of providing the full 9 years of basic education to all its citizens. Nevertheless, even in Scenarios 1 and 2, the increases in lower secondary gross enrolment are still very strong (reaching 72% and 81% respectively by 2015, compared to the baseline of 35% in 2009).

In primary education much of the saving comes from maintaining double-shifting (of both teachers and classrooms) at a high-level. Double-shifting evidently can be expected to have a negative impact on education quality. Nevertheless, various studies suggest that other aspects of improving education quality are more cost-effective. For this reason, both Scenarios 1 and 2 still aim to strongly improve the teacher-pupil ratio (note that teachers double-shifting count double in this ratio), and also to significantly boost teacher salaries.

Both Scenarios 1 and 2 see a significant cut in the average share of spending going towards upper secondary (7.4% and 7.5% respectively compared to 9.5% in Scenario 3). This is a consequence of the slowing down of 9YBE expansion putting less urgency in the need to rapidly develop the upper secondary sector to accommodate 9YBE finishers. Nevertheless, in all three scenarios the trend for spending on upper secondary to increase across the period of the ESSP remains.

Expansion of both Higher Education and TVET remain strong in both Scenarios 1 and 2, although their percentage shares of spending still decrease year-on-year because of the increasing dominance of 9YBE in the education budget. Nevertheless, in both scenarios enrolment expansion is notably less dramatic than in Scenario 3 (as seen in Table A10).

Spending on pre-service teacher training is largely protected in Scenarios 1 and 2, with targeted enrolment expansion of TTCs equivalent in Scenario 2 to Scenario 3, and only slightly decreased in Scenario 1. For Colleges of Education enrolment expansion is only marginally less in Scenarios 1 and 2 than for Scenario 3. This protection of spending reflects the Ministry's prioritisation of teacher training, as it is recognised that a lack of properly trained teachers is one of the biggest obstacles to educational quality across the education sector and particularly for basic education.

Spending on STR is completely protected across all three scenarios. This reflects the Ministry's prioritisation of science and technology in education as emphasised in the ESSP. (Note that spending on ICT principally comes within primary and secondary spending as a sub-programme. This spending is also broadly prioritised in Scenarios 1 and 2, although with a slower expansion in secondary education, savings can be made while per student spending remains constant.)

Beyond Scenario 1

Even Scenario 1 has a financing gap of 11% with projected external support. MINEDUC hopes that greater support from current and potential development partners along with the Government of Rwanda will be sufficient to close at least this gap. Despite this, the Ministry recognises the possibility that it may be unable to fully close even this smaller gap and would thus need to make further prioritisation of resources.

This prioritisation would be based on similar principles to those seen in Scenarios 1 and 2. The commitment to full 9YBE would remain, but the speed with which this is attained would have to

be further reduced. Reflecting this prioritisation the share of spending on 9YBE will in any case remain high and not be allowed to fall much below 65%. The concomitant expansion in upper secondary would similarly be delayed, potentially beyond the period of the current ESSP. Likewise, the pressures on TVET to expand would be reduced by less immediate attainment of full 9YBE. Nevertheless, TVET remains a core priority for MINEDUC and expansion will continue in any reasonable spending scenario, although with less resources available the need to maximise engagement with private sector providers will become more acute.

To accommodate the particular prioritisation of 9YBE and TVET, to achieve continued expansion there will be greater pressure and urgency for the Higher Education sector to engage and promote private sector providers, and to further investigate ways to improve revenue generation and thus financial self-sufficiency. Support to science and technology, ICT, and teacher training will be protected where possible in all spending scenarios.

Table A1: Scenario 1 Actual and projected recurrent expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10 - 2014/15)
Pre-primary	299	215	307	341	379	432	1,973
Primary	55,809	63,576	76,824	85,145	94,715	108,117	484,187
Lower secondary	24,478	36,387	48,170	52,717	57,748	61,589	281,088
Upper secondary	9,718	10,062	12,037	15,780	19,988	23,361	90,946
Pre-service teacher training	1,480	2,626	2,979	3,311	3,620	4,218	18,235
TVET	7,366	7,452	7,798	8,476	9,218	10,029	50,340
Higher education	33,438	32,386	32,894	33,993	35,693	38,284	206,687
Non-formal	435	458	468	496	527	559	2,942
STR	1,648	3,513	3,618	3,727	3,838	3,954	20,297
Institutional support	1,412	1,507	1,530	1,645	1,820	2,021	9,935
TOTAL	136,083	158,182	186,625	205,631	227,547	252,563	1,166,632

Table A2: Scenario 1 Actual and projected capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected capital expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Pre-primary	-	-	-	-	-	-	-
Primary	3,810	-	260	260	271	282	4,882
Lower secondary	7,076	9,360	4,490	622	647	673	22,869
Upper secondary	-	-	426	443	40	41	949
Pre-service teacher training	181	119	836	869	904	940	3,849
TVET	1,816	5,222	1,439	1,392	1,567	1,742	13,179
Higher education	2,241	2,337	2,480	2,650	2,843	3,060	15,612
Non-formal	-	-	-	-	-	-	-
STR	-	-	-	-	-	-	-
Institutional support	-	-	-	-	-	-	-
TOTAL	15,124	17,038	9,931	6,237	6,272	6,738	61,340

Table A3: Scenario 1 Actual and projected recurrent + capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent + capital expenditure	2009/10 (Actual)		2010/11 (Projected)		2011/12 (Projected)		2012/13 (Projected)		2013/14 (Projected)		2014/15 (Projected)		TOTAL (2009/10-2014/15)	
Pre-primary	299	0.2%	215	0.1%	307	0.2%	341	0.2%	379	0.2%	432	0.2%	1,973	0.2%
Primary	59,619	39.4%	63,576	36.3%	77,084	39.2%	85,406	40.3%	94,986	40.6%	108,399	41.8%	489,069	39.8%
Lower secondary	31,554	20.9%	45,747	26.1%	52,660	26.8%	53,339	25.2%	58,396	25.0%	62,262	24.0%	303,957	24.8%
Upper secondary	9,718	6.4%	10,062	5.7%	12,463	6.3%	16,223	7.7%	20,027	8.6%	23,402	9.0%	91,896	7.5%
Pre-service teacher training	1,661	1.1%	2,745	1.6%	3,815	1.9%	4,180	2.0%	4,524	1.9%	5,158	2.0%	22,084	1.8%
TVET	9,183	6.1%	12,674	7.2%	9,237	4.7%	9,869	4.7%	10,786	4.6%	11,771	4.5%	63,519	5.2%
Higher education	35,679	23.6%	34,722	19.8%	35,374	18.0%	36,643	17.3%	38,536	16.5%	41,344	15.9%	222,299	18.1%
Non-formal	435	0.3%	458	0.3%	468	0.2%	496	0.2%	527	0.2%	559	0.2%	2,942	0.2%
STR	1,648	1.1%	3,513	2.0%	3,618	1.8%	3,727	1.8%	3,838	1.6%	3,954	1.5%	20,297	1.7%
Institutional support	1,412	0.9%	1,507	0.9%	1,530	0.8%	1,645	0.8%	1,820	0.8%	2,021	0.8%	9,935	0.8%
TOTAL	151,207		175,220		196,556		211,868		233,818		259,301		1,227,972	

Table A4: Financial overview 2009/10-2014/15 - Scenario 1

	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Expenditure	151,207	175,220	196,556	211,868	233,818	259,301	1,227,972
Recurrent	136,083	158,182	186,625	205,631	227,547	252,563	1,166,632
Capital	15,124	17,038	9,931	6,237	6,272	6,738	61,340
Resources	151,207	163,596	176,834	183,801	198,544	214,210	1,088,193
Domestic resources	120,190	130,488	140,560	147,271	160,335	174,320	873,164
Budget support	30,167	32,048	34,976	35,024	36,412	37,769	206,395
On-budget project support	851	1,061	1,298	1,506	1,797	2,121	8,634
Financing gap (expenditure - resources)	-	11,624	19,722	28,067	35,275	45,091	139,779
Financing gap without external support	31,018	44,733	55,996	64,597	73,483	84,981	354,808

Table A5: Scenario 2 Actual and projected recurrent expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10 - 2014/15)
Pre-primary	299	215	320	481	563	657	2,533
Primary	55,809	64,121	79,920	91,473	109,726	131,328	532,377
Lower secondary	24,478	37,745	51,923	58,147	65,256	71,416	308,965
Upper secondary	9,718	10,107	12,098	16,918	22,239	27,192	98,274
Pre-service teacher training	1,480	2,641	3,040	3,440	3,812	4,492	18,904
TVET	7,366	7,606	8,596	9,501	10,424	11,349	54,842
Higher education	33,438	32,436	33,774	35,553	38,728	42,287	216,216
Non-formal	435	458	482	516	553	592	3,035
STR	1,648	3,513	3,618	3,727	3,838	3,954	20,297
Institutional support	1,412	1,507	1,563	1,772	2,058	2,365	10,676
TOTAL	136,083	160,349	195,333	221,527	257,196	295,631	1,266,119

Table A6: Scenario 2 Actual and projected capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected capital expenditure	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Pre-primary	-	-	-	-	-	-	-
Primary	3,810	-	1,785	198	206	214	6,212
Lower secondary	7,076	10,920	7,393	2,585	2,688	2,796	33,458
Upper secondary	-	-	651	677	143	149	1,620
Pre-service teacher training	181	135	930	967	1,006	1,046	4,265
TVET	1,816	5,744	1,850	1,818	2,010	2,188	15,426
Higher education	2,241	2,441	2,642	2,878	3,143	3,440	16,786
Non-formal	-	-	-	-	-	-	-
STR	-	-	-	-	-	-	-
Institutional support	-	-	-	-	-	-	-
TOTAL	15,124	19,240	15,251	9,124	9,196	9,832	77,766

Table A7: Scenario 2 Actual and projected recurrent + capital expenditure 2009/10-2014/15 (RWF millions)

Actual and projected recurrent + capital expenditure	2009/10 (Actual)		2010/11 (Projected)		2011/12 (Projected)		2012/13 (Projected)		2013/14 (Projected)		2014/15 (Projected)		TOTAL (2009/10-2014/15)	
Pre-primary	299	0.2%	215	0.1%	320	0.2%	481	0.2%	563	0.2%	657	0.2%	2,533	0.2%
Primary	59,619	39.4%	64,121	35.7%	81,704	38.8%	91,671	39.7%	109,932	41.3%	131,542	43.1%	538,589	40.1%
Lower secondary	31,554	20.9%	48,665	27.1%	59,315	28.2%	60,732	26.3%	67,944	25.5%	74,212	24.3%	342,422	25.5%
Upper secondary	9,718	6.4%	10,107	5.6%	12,749	6.1%	17,595	7.6%	22,382	8.4%	27,341	9.0%	99,894	7.4%
Pre-service teacher training	1,661	1.1%	2,776	1.5%	3,970	1.9%	4,407	1.9%	4,818	1.8%	5,538	1.8%	23,169	1.7%
TVET	9,182	6.1%	13,350	7.4%	10,446	5.0%	11,319	4.9%	12,434	4.7%	13,537	4.4%	70,268	5.2%
Higher education	35,679	23.6%	34,877	19.4%	36,417	17.3%	38,431	16.7%	41,871	15.7%	45,727	15.0%	233,002	17.3%
Non-formal	435	0.3%	458	0.3%	482	0.2%	516	0.2%	553	0.2%	592	0.2%	3,035	0.2%
STR	1,648	1.1%	3,513	2.0%	3,618	1.7%	3,727	1.6%	3,838	1.4%	3,954	1.3%	20,297	1.5%
Institutional support	1,412	0.9%	1,507	0.8%	1,563	0.7%	1,772	0.8%	2,058	0.8%	2,365	0.8%	10,676	0.8%
TOTAL	151,207		179,589		210,584		230,650		266,392		305,464		1,343,886	

Table A8: Financial overview 2009/10-2014/15 - Scenario 2

	2009/10 (Actual)	2010/11 (Projected)	2011/12 (Projected)	2012/13 (Projected)	2013/14 (Projected)	2014/15 (Projected)	TOTAL (2009/10- 2014/15)
Expenditure	151,207	179,589	210,584	230,650	266,392	305,464	1,343,886
Recurrent	136,083	160,349	195,333	221,527	257,196	295,631	1,266,119
Capital	15,124	19,240	15,251	9,124	9,196	9,832	77,766
Resources	151,207	163,596	176,834	183,801	198,544	214,210	1,088,192
Domestic resources	120,189	130,488	140,560	147,271	160,335	174,320	873,163
Budget support	30,167	32,048	34,976	35,024	36,412	37,769	206,395
On-budget project support	851	1,061	1,298	1,506	1,797	2,121	8,634
Financing gap (expenditure - resources)	-	15,993	33,749	46,850	67,848	91,254	255,693
Financing gap without external support	31,018	49,101	70,024	83,380	106,057	131,144	470,723

Table A9: Financing gaps in the scenarios as % of total cumulative expenditure 2010-15

	Scenario 1	Scenario 2	Scenario 3
Financing gap as % of total cumulative 2010-15 expenditure WITH projected external support	11%	19%	31%
Financing gap as % of total cumulative 2010-15 expenditure WITHOUT external support	29%	35%	45%

Table A10: Target comparisons for three scenarios

	Baseline 2009	2012			2015		
Scenario:		1	2	3	1	2	3
Pre-primary GER	13%	15%	15%	15%	17%	18%	20%
Primary:							
GER*	127%	110%	113%	115%	90%	95%	100%
(GER 7-12)	153%	135%	138%	142%	107%	113%	121%
Drop-out	15%	15%	14%	11%	14%	11%	9%
Repetition	15%	14%	14%	12%	12%	12%	10%
Pupil-Classroom Ratio**	70	77	76	69	76	74	63
% classrooms double-shifting	84%	84%	82%	60%	84%	80%	50%
Pupil-Qualified Teacher Ratio	63	59	58	56	53	47	47
% teachers double-shifting	100%	100%	100%	100%	95%	85%	80%
Average teacher salary as multiple of GDP per capita	2.0	2.6	2.7	2.8	3.3	3.6	3.9
Lower secondary:							
GER	35%	61%	66%	80%	72%	81%	97%
Repetition	7%	6%	6%	5%	5%	5%	5%
Average teacher salary as multiple of GDP per capita***	4.4	4.4	4.5	4.6	4.4	4.5	4.7
Post-basic:							
Upper secondary GER	17%	22%	23%	25%	36%	41%	51%
Upper Secondary average teacher salary as multiple of GDP per capita***	4.4	4.6	4.7	4.7	5.2	5.4	5.5
TVET total enrolment	39,191	44,558	49,641	52,923	50,527	60,352	72,797
TTCs total enrolment	4,150	6,731	6,797	6,797	8,132	8,434	8,434
COEs total enrolment	528	1,227	1,262	1,262	1,481	1,588	1,800
HLIs total enrolment	53,424	63,696	66,843	68,850	73,809	79,682	86,159

Footnotes:

1: * = The fact that the targets for 2015 in scenarios 1 and 2 are below 100% should not be considered problematic. This is because the chosen definition of the indicator considers the number of children in primary education as a percentage of children aged 6-12. Since the age range of 7 years is greater than the 6 years of primary schooling, it should not be seen as a failure to achieve the MDGs if this percentage is less than 100. More significant in this regard is the GER with an age range of 7-12 which remains above 100%.

2: ** = 2012 and 2015 targets actually see a worsening from the 2009 baseline of 70 in scenarios 1 and 2, principally because the 2009 baseline includes an estimated 2,500 classrooms for which the condition is such that they will effectively be obsolete by 2012.

3: *** = Currently available data on teacher salaries is for overall secondary (not broken down between lower and upper secondary) so these baseline data are estimates only.