



**DRAFT**

**EDUCATION & HUMAN RESOURCES STRATEGY PLAN  
2008-2020**

**Ministry of Education, Culture  
and Human Resources**

**November 2008**

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**ACRONYMS**

**MESSAGE FROM THE MINISTER**

# **EDUCATION & HUMAN RESOURCES STRATEGY PLAN 2008-2020**

## **VISION, MISSION AND SECTOR OBJECTIVES**

### **VISION**

A Quality Education for all and a Human Resource Development base to transform Mauritius into an intelligent nation state in the vanguard of global progress and innovation.

### **MISSION**

To develop a culture of achievement and excellence by promoting an efficient and effective World Class education and training system that is inclusive and integrated, comprehensive and holistic.

To foster innovation and to generate new knowledge for the socio-economic and sustainable development of the nation.

To ensure learning opportunities accessible to all provide learners with values and skills to further their personal growth, enhance their critical and exploratory thinking, encourage them to innovate and to adapt to changes in an increasingly globalised environment.

### **EDUCATION SECTOR OBJECTIVES**

1. To ensure that ALL children aged 3 to 5 years in Mauritius have the opportunity to develop their individual intellectual, socio-emotional and psycho-motor skills to the best of their capacity in order to build the confidence and self-esteem in learning that will not only prepare them for the next level (primary school) but more importantly, lay the foundations for learning that will support them throughout their lifetime.
2. To sustain equitable access to quality education, ensuring that all learners attain high levels of achievement in Literacy, Numeracy, Information and Communications Technology and such essential Life Skills as sound human values, healthy lifestyle and so forth as the basis for lifelong learning and good citizenship.
3. To ensure that all students are given the opportunity to embark on and complete higher secondary education for employability and higher and further education and training with the required maturity and confidence.
4. To build a system that ensures a supply of quality personnel that work collegially with a strong management and quality assurance system to improve and support learning achievement and overall development of all learners.
5. To provide an efficient and effective TVET system of greater public esteem responsive to the present and future needs by providing skilled and flexible workforce.
6. To make Mauritius an intelligent island, a Knowledge Hub to serve the Region and a Centre for Higher Learning and Excellence.
7. To build a creative and competent Human Resource base for Mauritius for sustainable national development.
8. To develop the Ministry of Education & Human Resources into an efficient, effective, and accountable functioning public institution that exemplifies 'best practices' at all levels of the organisation.

# Executive Summary

The Education & Human Resources Strategy Plan (EHRSP) has been formulated in line with the vision of providing a quality education for all and developing a Human Resource base to transform Mauritius into an intelligent nation state in the vanguard of global progress and innovation through the development of a culture of achievement and excellence.

Central to this Plan is the universalisation of opportunities for quality education at all levels, right from pre-primary through to post-secondary education subsectors, and for the training sector. The drive is thus towards ensuring access to learning opportunities for all and fostering innovation and generating new knowledge for the socio-economic and sustainable development of the nation.

It is today recognized that the ultimate objective of any educational enterprise is to improve student achievement so that individuals may fulfil their personal aspirations for a sound, value-based lifestyle and also become positive contributing members of society. This requires new systems, structures, tools and knowledge. But more than anything else, the culture of the education and training system must be realigned: the focus should now shift from access—which is today a reality—to quality and relevance.

The Plan is hence premised on the fact that we must create a culture of achievement throughout and at all levels of the system. This pre-supposes the importance of building flexible and integrative structures that encompass both the education and training sectors if Mauritius is to achieve the stated objectives of the Plan. Students should be able to learn and adapt to the new skills and training that will be required. They thus have to acquire new skills within the lifelong learning framework and that means ensuring that qualifications systems give them credit for the experience and knowledge they have gained, whether in the classroom, in the workplace or elsewhere.

## Structure of the EHRSP

**Part I** of the Plan provides alongside the social and economic background of Mauritius the much-needed reform strategies that have to be called for if a shift from the traditional 4 to a multi pillar economic base is to be a reality such that the nation becomes more resilient to global changes. The newly emerging sectors necessitate a re-engineering of our education and Human Resource Development (HRD) system such that it can both be supportive of these developments and make room for adjustments to new changes that might take place in the coming years. Globalisation, too, leaves the Mauritian economy with no choice but to open up and compete with the economies of other countries and concentrate on more knowledge- and skill-intensive activities and higher-value-added financial and business services, while efforts have simultaneously to be sustained to make of Mauritius an “île durable”.

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The need for major reforms in the current education and training sector is hence strongly felt. Typical of the scenario in many other countries, the issue of access to education has taken precedence over quality. The challenge for Mauritius consequently is how to balance access with quality so as to achieve high access and high quality. Indeed, the rapid pace at which the system has been called upon to respond to the social demands for education has had the effect of limiting systemic reform. This has impacted especially on the quality of provision, which has directly affected education outcomes.

### ***Creating a Culture of Achievement and Excellence***

Re-aligning the education provision of Mauritius is therefore of utmost importance to each and every Mauritian, and to the country as a whole. Access to education is no longer enough. Strong foundations at the lower levels of the system must ensure that all children acquire confidence in their learning abilities to ensure that they will succeed at the higher levels of the system, and be prepared to enter a competitive job-market with a respect and thirst for knowledge that will maintain them throughout their life, during market fluctuations and employment diversity. The only way to ensure this is by creating a culture of achievement throughout the system, and at all levels of the system while at the same time encouraging learners to develop the ability to reflect values of sound citizenship.

But above all, to boost student achievement, to leave no child behind, the culture of the education system must change. Creating a culture of achievement throughout the system requires meaningful, process-oriented change within the education system, which in turn requires a level of professionalism, accountability and devotion from teachers and school leaders for both the learning environments they provide and the learning outcomes they enable their students to achieve.

### ***Transforming the Ministry of Education & Human Resources (MOEHR)***

The case is made that the EHRSP, especially in the wake of the Programme-Based Budgeting (PBB) system, is a mandate for the transformation throughout the system, - including the MOEHR. To that effect, the MOEHR needs to undertake an in-depth analysis of its internal functional and structural procedures.

**Part II** of the EHRSP reflects on the inefficiencies of the system, of which student retention, failure and attrition as well as the quality of teaching and learning are central. The most cited 'inefficiencies' of the current education system in Mauritius, are the still relatively high percentage of students failing and/or repeating the CPE and an alarming attrition rate of young children turning out to be barely numerate and literate.

Pass Rates at CPE have improved from an overall figure for school candidates of 64.3% in 1999 to 67.9% in 2006, at School Certificate, from 72.3% in 2002 to 74.5% in 2006, and Higher School Certificate from 73.9% in 2002 to 74.9% in 2006 (with significantly higher pass rates for girls than for

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boys in all three cases). It is, however, noted that out of a cohort joining Standard I, only 13.5% pass their HSC in the first sitting. This results in the GTER being 37.3% (2007) showing that there is need for more students to make the grade in the secondary subsector and consequently be enrolled at the tertiary education level.

Also, with regard to Special Education Needs (SEN) it is important that SEN policy guidelines and strategic framework move forward immediately along specifically defined goals and targets for each year so that by 2020, all SEN children in Mauritius will be enjoying access to relevant, high-quality provision.

The failure rates and the competition that characterise the sector are a direct result of the branding and labelling of both students and schools, which in turn directly impacts the demand placed on the system. The challenge for the EHRSP therefore, is to ensure that the 'innovative practices' that have been put in place (e.g. in ZEP schools) in Mauritius, are spread throughout the system in order to avoid inequities and disparities. These will help increase overall student performance measures (especially at CPE); and increasing boys' achievement and performance (and especially during the formative primary school years).

The case is therefore made for changing the approach to achievement by changing mindsets and inculcating a new school 'culture'. The issue of achievement thus rests on some major pillars. Quality of assessment and the quality of teaching are fundamental to any system that aims at excellence. This needs also to be accompanied by standardized assessment procedures since student outcomes are predominantly measured by standardized tests, which inspire confidence and respect in the education system as a whole. However, such a change will require a long-term investment.

In this enterprise, the importance of building flexible and integrative structures that encompass both the education and training sectors across all levels of the system is recognized if Mauritius is to achieve the EHRSP 2020 Objectives. The promotion of lifelong learning in terms of quantity, quality, efficiency and equitable distribution of learning opportunities as well as the quest for more and better flexible and integrative structures requires the concerted effort by all stakeholders in, among other things, designing and developing a qualifications framework that responds to national specifications, but has the ability to also encompass regional and international prerequisites.

**Part III** provides the Strategic Framework of the EHRSP. Following a situational analysis of each of the subsectors, the Overall Goal has been identified, followed by the critical challenges and the several strategic Goals. A summary of strategic activities is subsequently made for each section. A matrix has also been developed at the end of each section comprising, in addition to the Strategic goals and strategic objectives, the targets set, the relevant indicators by which it will be determined that these targets have been met and the corresponding activities to be carried out.

For the purpose of this Plan, the Education and Training sector has been broken down into eight subsectors which are elaborated hereunder.

### ***1. THE EARLY CHILDHOOD CARE AND EDUCATION (ECCE) SUBSECTOR--BUILDING SOLID FOUNDATIONS FOR LEARNING***

The Overall Goal of this subsector is to ensure that ALL children aged 3 to 5 years in Mauritius should have the opportunity to develop their individual intellectual, socio-emotional and psycho-motor skills to the best of their capacity in order to build the confidence and self-esteem in learning that will not only prepare them for the next level (primary school) but more importantly, lay the foundations for learning that will support them throughout their lifetime.

Four Critical Challenges have been identified as confronting the sub-sector, comprising the necessity of addressing the problem of out-of-school children in the age group due to absolute poverty, ensuring that a proper regulatory framework is in place with suitable norms and standards to overcome the existing disparity in pre-schools, adoption of pro-active measures for the early detection of children with special needs and addressing these and adapting the Curriculum to ensure readiness for primary school.

The Strategic Goals of Early Childhood Care and Education during the period 2008-2020 are as follows:

1. Review legislative and regulatory framework for the provision of ECCE
2. Ensure access of all children aged 3 to 5 years to pre-primary education.
3. Establish a network for a holistic approach to ECCE
4. Improve the quality of learning environments
5. Embed technology in the system
6. Undertake regular review of curricula
7. Ensure that all pre-primary educators are fully trained and qualified.
8. Encourage and support the inclusion of children with special needs and those from disadvantaged socio-economic backgrounds.
9. Foster research and development in ECCE
10. Enhance professional development for the general improvement for early childhood education

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### ***2. THE PRIMARY EDUCATION SUBSECTOR--REINFORCING CONFIDENCE IN LEARNING AND ACHIEVEMENT***

The Overall Goal of MOEHR for primary education is to sustain equitable access to quality education, ensuring that all learners attain high levels of achievement in Literacy, Numeracy, Information and Communications Technology and essential Life Skills as the basis for both personal development and lifelong learning.

As indicated earlier, addressing the problem of high failure rate at the end of the primary cycle and making public spending on education become more cost-effective are crucial to this sub-sector. It therefore entails that the very purpose of CPE examinations has to be reviewed as the present day instrument of selection to a record of achievement and competencies acquired- with this requiring the integration of a remedial education programme in the curriculum, a gradual movement towards the elimination of the necessity of private tuition, the practice of which will be allowed only in the third cycle of the primary sub-sector (i.e. Grade 5 and 6) for a period of time. The integration of children with special education needs in the regular school system is also crucial. Equally critical is a strong empowerment of Head Masters to give them more autonomy and increase at the same time their accountability to produce results through the setting up of performance indicators.

The Strategic Goals of Primary Education during the period 2008-2020 have been spelt out as follows:

1. Improve equity of access to education
2. Provision of quality education to all
3. Achieve gender equality
4. Improve efficiency of school system

### ***3. THE SECONDARY EDUCATION SUBSECTOR--ESTABLISHING STRONG TRANSITIONS THROUGH ADOLESCENCE TO ADULTHOOD***

The Ministry will ensure that all students are given the opportunity to successfully complete higher secondary education and embark on higher and further education and training for employability with the required maturity and confidence.

This rests upon meeting the critical challenges of, inter alia, aligning secondary education with societal needs with due regard being paid to ensuring quality in the educational provision and delivery while making public spending on education become more cost-effective. The issue of parity and equity among and within the different publicly funded players and providers must be addressed, with particular emphasis on greater accountability and transparency in the conduct of affairs of publicly-funded institutions. Further, a move towards alternative modes of assessment other than SC and HSC has to be explored and prevocational education must be an integral part of secondary schooling.

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The Strategic Goals of Secondary Education during the period 2008-2020 have been identified to be the following:

1. Improve completion rate at upper secondary level and minimise wastage at secondary education level
2. Improve all aspects of quality education through measurable learning outcomes
3. Undertake regular review of curricula to respond to emerging needs of the economy and society.
4. Ensure that students obtain optimal opportunity for academic and self-development
5. Introduce support technology in the system
6. Continuous in-service training of school personnel at all levels
7. Increase access to secondary education to children with special education needs
8. Improve effectiveness of secondary school management system
9. Ensure equity among publicly-funded schools
10. Create a strong Quality Assurance system to secure internal efficiency and quality teaching and learning
11. Develop a decentralized management and delivery system that supports greater community participation

### ***4. SCHOOL STAFF DEVELOPMENT SUBSECTOR--FACILITATING PROFESSIONAL DEVELOPMENT FOR ENHANCING EFFICIENCY***

The Ministry is committed to the provision of lifelong opportunities for all cadres in the education sector. This will take the form of formal pre-service, in-service and flexible modes of continuous professional development so as to enable all school personnel to be well tuned with emerging issues, knowledge and skills needed in a world that is in a constant state of flux and that demands continuous adaptability.

This is in keeping with the need to improve the professional qualification of all cadres in primary and secondary schools and provide suitably qualified personnel with sound pedagogical and administrative skills and competencies to deal with pedagogical and para-schooling features as well as encouraging the development of a strong community of practice within schools.

The Strategic Goals of School Staff Development during the period 2008-2020 are as follows:

1. Offer a wide range of responsive, flexible, high quality and challenging teacher education programmes in line with international norms and standards.
2. Give a greater thrust to special education needs.
3. Ensure transferability, sustainability of training undertaken by teachers, recognition and dissemination of good practices through the creation of a community of practice at school's level.

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4. Strengthen partnership with all stakeholders in education for effective support of teaching and learning in schools.
5. Ensure accountability of school leaders.
6. Review entry qualifications and modes of selection for all cadres in education and increase opportunity for continuous professional development in the sector.
7. Further strengthen and develop Distance Education
8. Develop a comprehensive HR strategy for training in the sector.
9. Further invest in Strategic and Action Research in education.
10. Strengthen MIE as an Institution of excellence in Teacher Education, Research and Curriculum Development.

### **5. TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) SUBSECTOR— FOSTERING LIFELONG EMPLOYABILITY**

TVET is more and more relied upon as a policy instrument to address the need for skilled manpower in both existing and emerging economic sectors to be able to compete globally. It is also called upon to play an active role in the fight against poverty. On the other hand, changing technology and work organisation call for continuous upgrading of knowledge and skills in a lifelong learning environment. Unfortunately, for too long this sector has laboured under the perception that it is a track fit only for the academically less endowed and representing a 'dead end'. This has resulted from the absence of successful articulation of pathways between TVET and general education.

The Overall Goal of this subsector is to provide an efficient and effective TVET system responsive to the present and future needs by providing a skilled and flexible workforce for sustainable development.

The Strategic Goals for this sub-sector have accordingly been defined to be the following:

1. Increased access and improved equity in TVET
2. Improved articulation between TVET and mainstream education
3. Enhance the quality and relevance of TVET
4. Strengthen management of the TVET system
5. Sustained funding for TVET
6. Make Mauritius a Regional Hub for TVET

### **6. TERTIARY EDUCATION SUBSECTOR—DESIGNING THE FUTURE-THE HIGHER LEVELS OF KNOWLEDGE**

If tertiary education is expected to contribute significantly to the building of skills and the intellectual capacity of the country, there are a number of critical challenges that have to be faced, not least of which are an increased and widened access to quality tertiary education of international standards,

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carrying a degree of relevance such that it becomes more responsive to the needs of the labour market. Both effectiveness and efficiency as well as an optimal use of financial resources have to be aspired for.

The main objective for the tertiary education sector is to make Mauritius a Knowledge Hub to serve the Region and a Centre for Higher Learning and Excellence

In this context, the Strategic Goals of Tertiary Education during the period 2008-2020 have been identified to be as follows:

1. Increasing and widening access and ensuring equity
2. Enhancing quality and relevance
3. Ensuring financial sustainability
4. Strengthening sector capability
5. Meeting student needs
6. Facilitating research for national development
7. Enhancing linkages between TEIs and the Economic Sectors
8. Creating an effective national knowledge and innovation system
9. Internationalization of Mauritian Tertiary Education

### ***7. HUMAN RESOURCE DEVELOPMENT SUBSECTOR--SHAPING THE FUTURE THROUGH LIFE-LONG LEARNING and "HUMANPOWERMENT" OF MAURITIUS***

The Knowledge Economy demands that a human resource development system be developed that is pertinent to the needs of workplace: people have to have the intrinsic flexibility to adapt to changing demands through systematic training and retraining—itself an important appendage of lifelong learning. Indeed, all research points to the fact that the more educated and skilled the people, the better they are able to adapt to changes. Promoting human resource development in line with national economic and social objectives becomes then a critical challenge, and this necessitates fostering a culture of training and lifelong learning at the individual, organisational and national levels for employability and increasing productivity.

Therefore, a new model of education and training, a model of lifelong learning that encompasses learning throughout the lifecycle, from early childhood through to retirement becomes paramount.

The Overall Goal to make possible this "humanpowerment" is to build a creative and competent Human Resource base for Mauritius through human resource development and lifelong learning.

The Strategic Goals of Human Resource Development during the period 2008-2020 are as follows:

1. Transform Mauritius into a Knowledge Economy

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2. Build a world class human resource base
3. Develop and implement a lifelong learning policy
4. Foster Research & Development for effective HRD
5. Provide professional orientation to prospective entrants in the labour market

These Strategic Goals go a long way towards helping Mauritius to ensure success in competition for capital investment, develop a multi-skilled workforce for the economy and provide World Class Quality products and services for the global market.

### **8. SYSTEM MANAGEMENT REFORM –TRANSFORMING THE MOEHR**

Invested with the responsibility to effectively create an enabling policy environment for the transformations needed to drive changes in education and training, it is increasingly felt that the management and performance of the MOEHR will need to be improved through its governance, accountability and achievement structures that will co-ordinate the provision of quality educational services throughout the system.

The Ministry's vision for organizational change encompasses an adherence to public administration standards to achieve a sustainable ability to finance and support the delivery of improved quality education for all Mauritians. Achieving this, it is recognized, will require strengthening of the Ministry's institutional, financial, human, physical and technological capacities.

The Overall Goal is thus to develop the MOEHR into an efficiently functioning effective, accountable, and public institution that exemplifies 'best practices' – at all levels of the organization – in terms of management of its human, physical and financial resources.

The Strategic Goals of System Management Reform during the period 2008-2020 are as follows:

1. Build an effective and efficient education sector
2. Strengthen human resources and capacity development
3. Strengthen the links between policy analysis, planning and budgeting
4. Use state of the art technology to transform education management
5. Ensure quality assurance for education and training programmes

**Part IV** provides the modalities for implementation and monitoring of the system. The EHRSP (2008-2020) indicates what the education system of Mauritius should look like in the future and also takes on board the ways and means to successfully implement the vast agenda of reform and innovation. However, this necessitates an effective development of technical capacities at all levels.

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On the other hand, to better monitor the whole process of implementation, a set of key indicators will be identified which will allow assessment of progress made and results obtained on the basis of objective targets. In this connection, work will be undertaken to improve the Education Management Information System (EMIS) located in the Planning Department of the Ministry.

With regards to the organizational arrangements, overall co-ordination of the implementation and monitoring process will be the responsibility of a Steering Committee under the Chairpersonship of the Minister of Education & Human Resources. Technical Working Groups will be responsible for the direct preparation of the Annual Operational Plans and for the preparation of monitoring reports under the guidance of the Steering Committee. Moreover, consultations with national (and where relevant, international) education and training partners will be an essential part of the monitoring process. Throughout the year, regular meetings will be organized in order to keep all stakeholders informed about progress made and problems encountered during plan implementation.

# PART I

## 1. Introduction

### 1.1. *SOCIAL AND ECONOMIC BACKGROUND*

Mauritius has a highly diverse population, estimated to total 1.2 m. people. According to the latest census (2000), Indo-Mauritians comprise 68% of the population, Creoles 27%, Sino-Mauritians 3%, and Franco-Mauritians 2%. Creole however, is spoken and used in daily interactions by 80.5% of the population, Bhojpuri by 12.1%, French (which is also the cultural medium) by 3.4%, and English – although it is the ‘official’ language of the state (and thus, the official language of instruction in schools) is spoken and used in daily interactions by less than 1% of the population.

After centuries of colonization first by the Dutch, then the French and ultimately by the British, Mauritius gained independence in 1968, and opted to remain a member of the Commonwealth. The country’s strong ties with Britain moreover continue to impact society and define policy orientations (including educational choices) at the highest levels.

At independence in 1968, the country was considered poor by both regional and international standards, and had few natural resources. Subsequently, Mauritius has been a development success story. It achieved remarkable economic and social success, based on good governance and an exceptional use of trade preferences for sugar and clothing exports.

Over the last decade or more, economic growth has remained well below the ‘miracle’ years of 1970s and 1980s (when sugar production fuelled growth), with weaker investment and rising unemployment. Mauritius is now highly vulnerable to changes now taking place in the world trade regime.

The past 50 years have seen a rapid evolution where the economic base has shifted from a monocrop agriculture economy in the 1960s to a textile-dominated manufacturing base in the 1970s and a service economy with heavy emphasis on knowledge, the Financial sector and the ICT sector by the turn of the last century.

The Government now wants the economic base to be broadened further so that the impact of the triple shocks can be absorbed more easily and the nation becomes more resilient to global changes. The Budget 2007/2008 clearly lays emphasis on a multiple pillar economic base where the economy is called upon to shift from the traditional 4 pillars to one which will depend on 8 to 10 pillars. The newly emerging sectors like the Land Base Oceanic industry, the Seafood Hub, the Real Estate sector, the Pharmaceutical industry, the Financial sector, a diversified Tourism sector, a broad based ICT sector, a

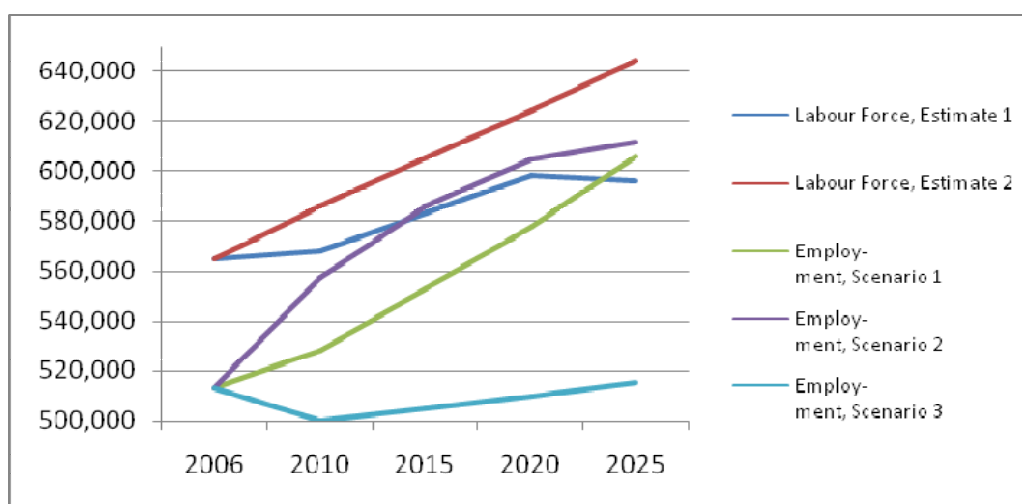
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buoyant logistics sector, the development of alternative energy sector, and the transformation of the sugar industry into a cane industry as well as the emergence of the Knowledge economy-- all call for a re-engineering of our education and HRD system. The education and Human Resource Strategy for the period 2008-2020 will therefore have to be supportive of these new developments and equally make room for adjustments to new changes that might take place in the coming years.

With globalisation, the Mauritian economy has no choice but to open up and compete with the economies of other countries, while efforts have to be sustained to make of Mauritius an “île durable”.

Projections to 2025 of the future labour force and extent of total employment in Mauritius, based on differing employment/unemployment scenarios, have been published by the Human Resources Development Council (HRDC) and show wide variations (as shown in Figure 1 below). This makes it very problematic to predict what will be the future education and training needs for Mauritius, in both quantitative and qualitative terms<sup>1</sup>.

**Figure 1: Employment/Unemployment Scenarios: Projections to 2025**



Source: National Human Resource Development Plan, Vol.1, 2007

Education is highly regarded by Mauritians as the key element of economic and social advancement, and to meeting labour force needs. Since independence in 1968, Mauritian leadership has had to plan, re-orientate, and re-invent the best ways to meet the challenges it had to face as a small, geographically isolated, island state. An educated population was seen as a vital component of prosperity and so heavy investment was made in providing access to education and where funds were not available by the State, the private sector was mobilized.

<sup>1</sup> Different labour force estimates depend on different assumptions relating to future female activity rates, from remaining constant (at 41%) to increasing by 2% per each 5-year period. Different employment scenarios depend on different assumptions relating to future rates of unemployment, from a low of 5% to a possible high of 15%.

Over the past decade, the groundwork has been laid to move the economy towards more knowledge- and skill-intensive activities and higher-value-added financial and business services. Successive governments have been implementing Mauritius' vision for its future, restructuring and down-sizing the sugar and textiles industries, making the necessary legislative reforms for the country to provide off-shore financial services, and drawing Foreign Direct Investment (FDI) into, inter-alia, the Information Technology (IT) sector through the development of a state-of-the-art, fibre-optic wired Cyber Tower. Major investments have already been undertaken to support this investment locally with the necessary well-trained and appropriately knowledgeable human resources, transport and environmental infrastructure.

### ***1.2. THE EDUCATION SYSTEM AND THE NEED FOR REFORM***

#### **1.2.1 The Development of the Education System**

As in many other countries, the Mauritian education system has evolved from a small-scale primarily private enterprise to a large-scale, national, publicly-funded education system. This 'evolution' came about with the high social demand for education as the country grew and prospered in the 1960s and 1970s. Partnership between the public and private sector is well-ingrained in Mauritian tradition – and not only within the education sector, but within all productive sectors of the economy. When the Government made the decision to provide free secondary education to all as from 1977<sup>2</sup> therefore, it was only natural that the private sector should step in to provide the facilities to meet the demand. The Private Secondary Schools Authority (PSSA) was established to provide the facilities and maintain standards at non-state secondary schools, while the state provided large grants to cover the recurrent costs.

#### **1.2.2 Policy Reforms and Action Plans**

Aware of the inequalities that had presented themselves as a consequence of private enterprise having shaped educational provision in the past, the government's impetus for free primary education for all (which started in the 1940s) was heightened after independence in 1968, resulting in an expansive primary-school building programme that would extend free primary education to all Mauritian children<sup>3</sup>.

In fact, successive Governments set for themselves the task of positing the centrality of education in their overall development policy for the sustainability of social and economic development of the country. This policy was translated in investment in the country's human resource. Several commissions of enquiry and various reports accordingly made recommendations for an education system more responsive to the systematically emerging needs of society. This culminated in a

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<sup>2</sup> Which caused enrolment at this level to rise considerably – and beyond the Government's ability to meet the demands, in terms of infrastructure, that this entailed.

<sup>3</sup> This resulted in near universal enrolment at primary level, long before primary education was made compulsory in 1982.

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landmark development in education in two watershed years, namely 1977 when education became free at the secondary level and the amendment of the Education Act<sup>4</sup> in 2005 to make education compulsory till the age of 16.

Mauritius has made commendable strides in a relatively short space of time<sup>5</sup> in adapting its education system according to the needs of its own society, while at the same time, being fully aware of the need to be aligned with both regional and international practices and directions<sup>6</sup>.

One of the recommendations of the Jomtien Education for All world conference in 1990, was that each country should develop an Action Plan for Education based not only on facts and figures, but clear objectives and realistic goals, accompanied by a well-planned strategy to achieve these goals and objectives. The Ministry of Education of Mauritius<sup>7</sup> thus produced a Master Plan on Education in 1991, which was not only used to guide reforms in Mauritius at that time, but was considered by the Donor Community (at that time) as a 'model' plan upon which to base similar plans for the developing world.

However, although there was progressive implementation of the Master Plan of 1991, the development of a clear and precise Action Plan for Education (as recommended by the Jomtien conference in 1990) did not materialize until 1998, and by this stage, Mauritius was being called upon to respond to new demands set by a shift in the economy - from a mostly agricultural to a more industrial and diverse one.

The present structure of the Mauritian education system is shown in the following chart:

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<sup>4</sup> Formal education at all levels is governed by the Education Regulations of 1957 and the Education Act of 1982 and their various amendments.

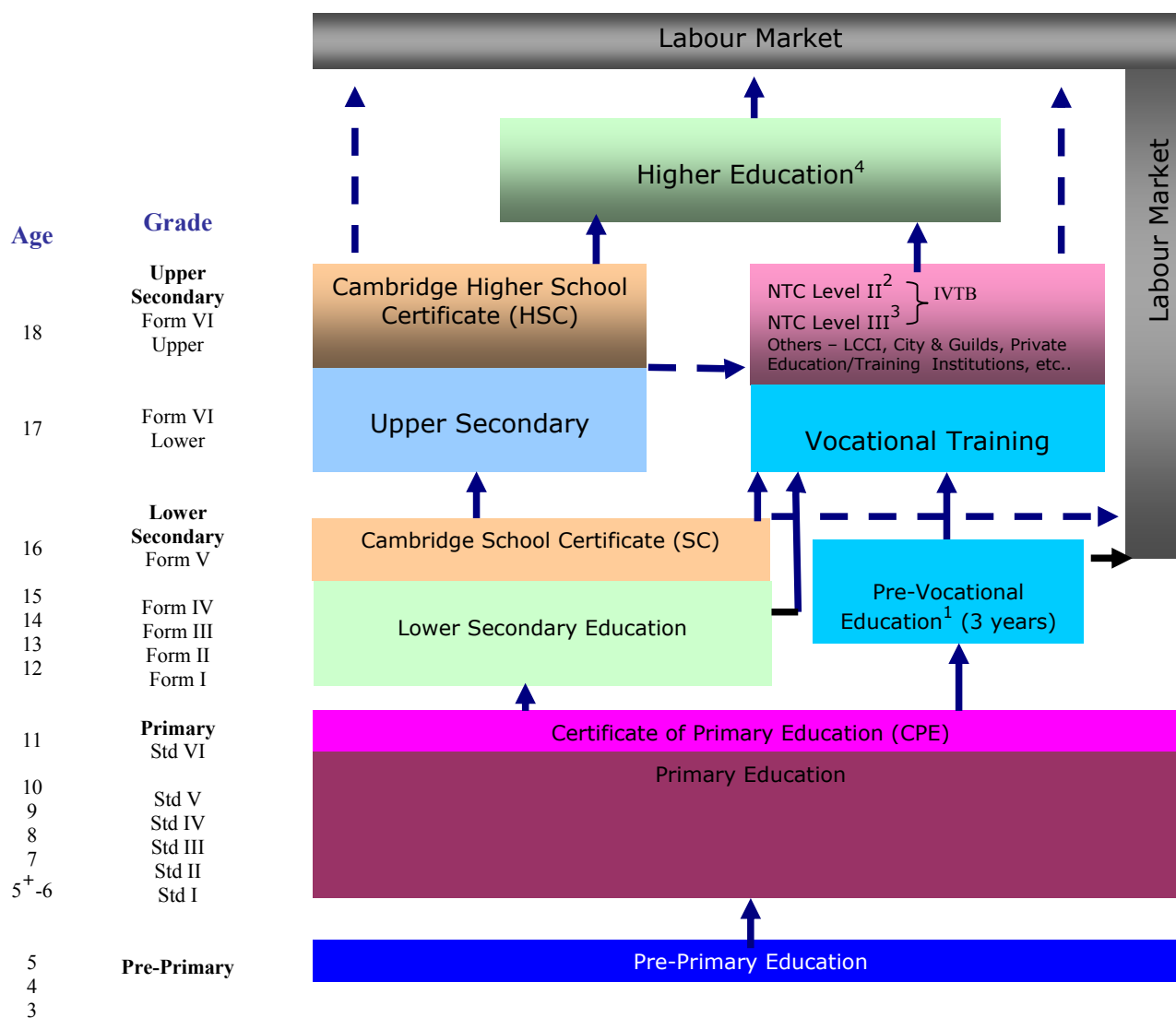
<sup>5</sup> Since independence in 1968.

<sup>6</sup> For example: Education For All, Millennium Development Goals, SADC Protocol for Education and Training.

<sup>7</sup> Then, the Ministry of Education and Scientific Research (MOESR).

Figure 2: Current Structure of the Mauritian Education System

## Pathways of the Education and Training System in Mauritius



### Key:

1: Pre-Vocational education was provided for those pupils who have failed the CPE after a second attempt and hence were not eligible for admission in secondary schools. In 2001 pre-vocational classes were integrated in secondary schools alongside the mainstream classes. The pre-vocational curriculum provided for basic literacy, numeracy, science, technical and ICT skills over three years. Upon completion of the pre-vocational programme, students follow a bridging course- the NTC foundation course, which allows for progression in the TVET sector. Entry requirements for the TVET sector vary from completion of Form III to Form V.

NTC - National Trade Certificate, IVTB - Industrial & Vocational Training Board

2: Requirements for NTC Level II vary between SC and HSC or NTC III

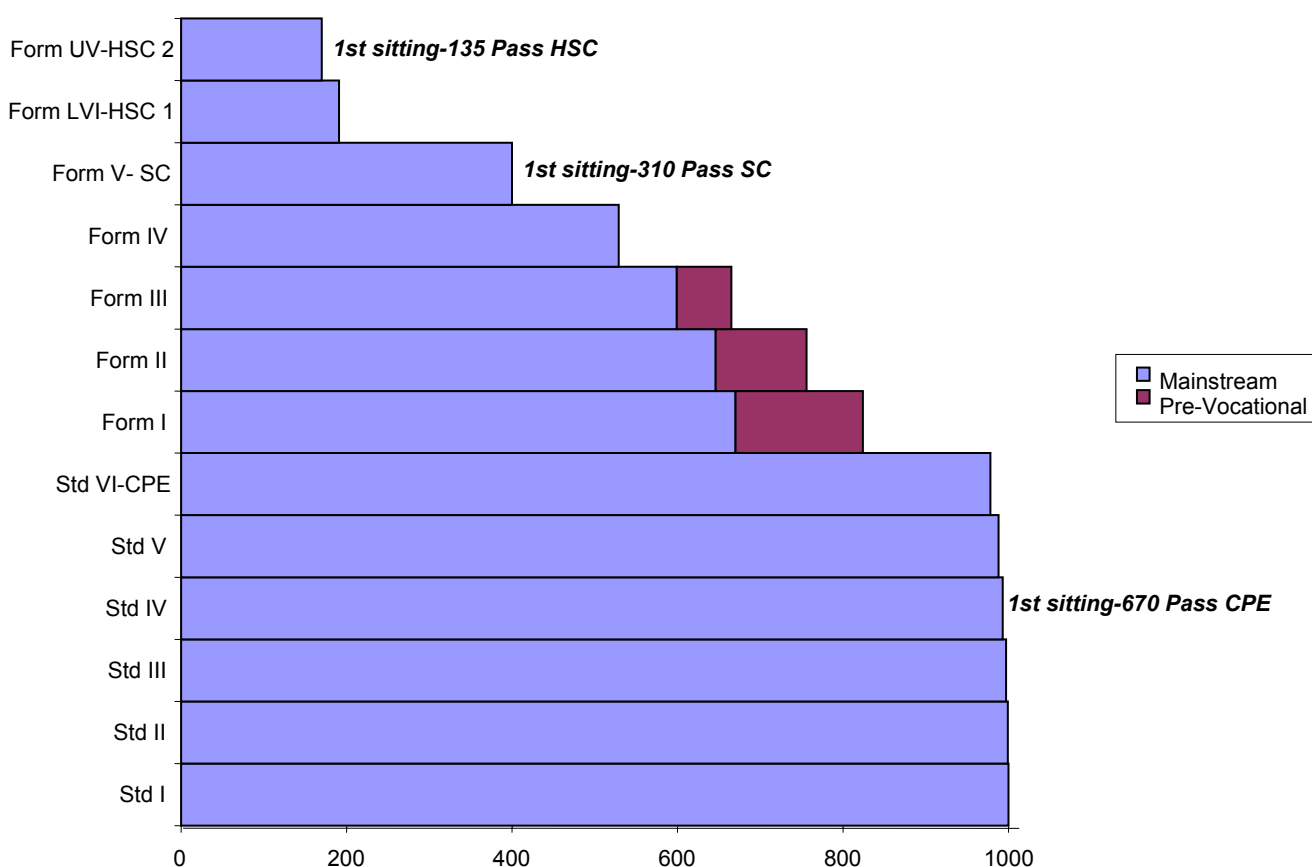
3: Requirements for NTC Level III vary between Form III and SC or NTC III Foundation Course (Min. Age: 15)

4: Refers to Post A -Level / HSC

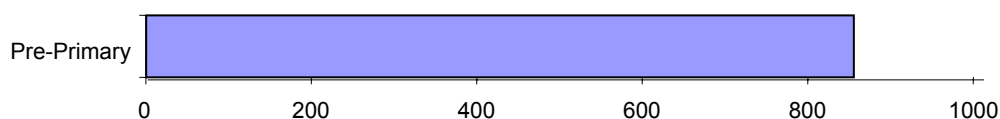
## EDUCATION & HUMAN RESOURCES STRATEGY PLAN 2008-2020

A cohort analysis over 13 years of education ( 6 years primary and 7 years secondary) as illustrated in Figure 3 reveals that only 28 percent of the cohort entering the first grade of the primary cycle in 1994 had successfully completed the last grade of secondary education in 2006, inclusive of those having repeated a grade. On the other hand, not all of the secondary graduates found their way to the tertiary subsector, either for reasons of ineligibility or limited access, or again lack of funds.

**Figure 3: Flow of a Hypothetical Cohort Entering Standard I in 1994 and Reaching UVI in 2006**



**Note:** At this juncture, enrolment at pre-primary stands at about 86 percent.

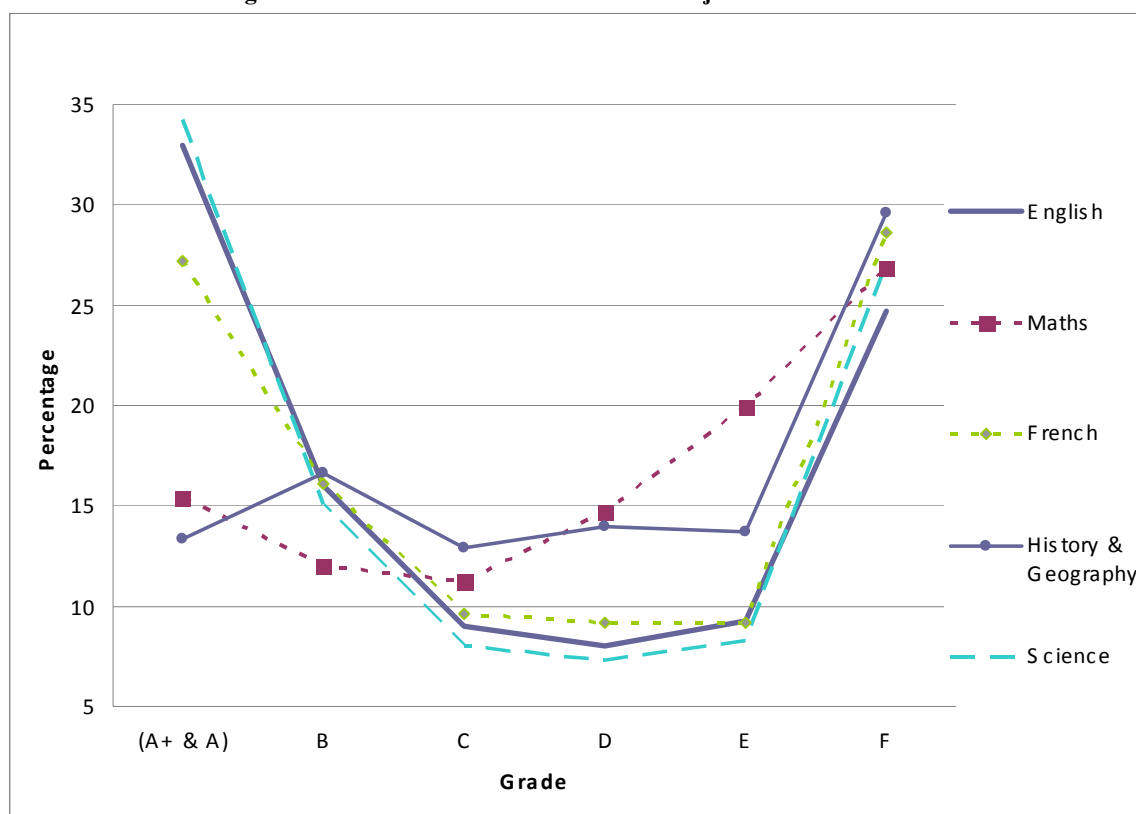


## 1.2.3 A note on performance

The above results from the academic deficit starting from the primary sector. An analysis of the distribution of pupils' pass rates at the CPE level over the past six years indicates that the distribution of scores is "U-shaped" instead of the expected normal bell-shaped distribution associated with the distribution of intelligence in the population. Indeed, the distribution of pupil achievement scores is very unusual. This is depicted in Figure 4 below. Mauritius produces a significant number of primary school graduates with "A" scores and a significant number with "F" scores and a low number of pupils with the intermediate scores of "B" to "E".

The "U- shaped" curve indicates that the system has developed into a two track-system and characterises an important inequity in learning pupil achievement. This confirms that the expected primary school outputs (i.e. the CPE graduates) are biased towards a highly academic approach that does not recognize the barriers to learning faced by the majority of pupils.

**Figure 4: Distribution of Grades in Core Subjects for CPE in 2007**



Source: *Website of Mauritius Examination Syndicate*

Such remedial measures as baseline profiling, pupil's report sheets as well as diagnostic assessments have started to be taken alongside curriculum reforms and teacher development to reverse this situation and to avoid its occurrence in the secondary sector.

### 1.3. *Restructuring of the Education System*

Restructuring of the education system has had the same fate as some of the policy inputs noted above. For example, the abolishing in 2002 of the official ranking system of students for admission to highly-rated secondary schools,<sup>8</sup> did little to ease the pressure on students at CPE level and the struggle to get into 'the best secondary school' (forcing some students to re-sit the CPE even when they had passed simply to improve their results). Over time, it was not so much that the students were being ranked, but that the secondary schools themselves had acquired that esteem (by proxy, through the students they had admitted over the past 25 years)

The introduction of Pre-Vocational Education (PVE) at secondary school level to provide for students who had failed the CPE twice, and who as from 2005 were obliged by law to stay in school till the age of 16, has had as an outcome – namely the negative 'branding' of vocational education – a sector which today is vitally important to the realignment of the education system to develop the human capital that will enable the country to meet its future economic targets.

Although these measures in themselves were well-intentioned and can be appreciated for their independent value, it was the pace at which the education system of Mauritius has grown and has been called upon to respond that has limited the effectiveness of such measures

The Government's bold and ambitious structural adjustment plan is aimed at facilitating the transition, which the country recognizes it must make, as speedily and as efficiently as possible. This 'transition' is elaborated in even the Government's Budget Speech of 2006-2007, which had the theme 'Securing the Transition - From Trade Preference to Global Competition' and states:

*"Offering quality education and work-based education in Mauritius is the building-block for a successful services platform and for serving as a Regional Multi-Disciplinary Centre of Excellence.....The single over-riding purpose of this year's Budget is to create jobs, promote employment and return to growth by securing the transition from a preference-dependent to a globally-competitive economy."*

Source: Budget Speech 2006-2007

If Mauritius aims at becoming a globally competitive nation, it is critical that the country "shores up its capacity in Tertiary Education, in Science, Technology and Innovation (STI) and in human resources generally" (Budget Speech, 2008-2009, Pp 11).

The Budget Document (2008-2009) announced a series of measures including the financial means that would help attain the target of doubling the enrolment ratio at tertiary by 2015. Actions related thereto

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<sup>8</sup> Known as 'star schools'.

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will work on two fronts. First, increasing opportunities to access higher education following the necessary infrastructural development backed by a loan scheme to needy students to ensure that no one who is eligible is debarred from tertiary education through lack of funds; and also offering flexible learning modes to those already in employment. Second, increasing completion rates at primary and secondary levels so that more students qualify for tertiary education. Equally, to take on board those who lack the academic aptitude to make it to post-secondary education, an alternative pathway will be introduced at the end of Form IV, allowing them to opt for a tertiary vocational education.

To further sustain economic growth, optimum use must be made of each and every unit of the country's human capital starting as early as the pre-school sector so as to reach those who have been out of the formal system for reasons of absolute poverty. Also, since the education system is characterised by a low internal efficiency resulting in a significant number who drop out of school, efforts must be made to recoup these. The proposed Second Chance Programme in the 2008-2009 Budget aims at addressing this issue through the provision of basic numeracy and language skills to those under 21 who have dropped out of school and are not in full time employment. The programme will include a strong emphasis on life training skills and provide psychological and social back up. These young people will be oriented to a vocational programme.

### *1.4. Balancing Access with Quality*

Mauritius can rightly claim to be endowed with an educational tradition that is based on solid foundations, enabling both the public and private sectors to work in partnership to respond to the needs of society for greater (and increasing) access to educational services and provision. Equality of opportunity is guaranteed by the system which is characterized by diversity in the provision of education. However, the rapid pace at which the system has been called upon to respond to the social demands for education has had the effect of limiting systemic reform. This has impacted especially on the quality of provision, which has directly affected education outcomes. As in many other countries, the issue of access to education has taken precedence over quality. The challenge for Mauritius now is how to balance access with quality so as to achieve high access and high quality.

### *1.5. Creating a Culture of Achievement and Excellence*

Re-aligning the education provision of Mauritius is therefore of utmost importance to each and every Mauritian, and to the country as a whole. Access to education is no longer enough. Strong foundations at the lower levels of the system must ensure that all children acquire confidence in their learning abilities to ensure that they will succeed at the higher levels of the system, and be prepared to enter a competitive job-market with a respect and thirst for knowledge that will maintain them throughout their life, during market fluctuations and employment diversity. The only way to ensure this is by creating a culture of achievement throughout the system, and at all levels of the system.

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The ultimate objective of any educational enterprise is to improve student achievement so that individuals may fulfill their personal aspirations and become contributing members of society. Improving student achievement and attaining excellence is hard. It requires meaningful change in the way educators do their work. It requires new structures, new tools and new knowledge. But more than anything, to boost student achievement, to leave no child behind, the culture of the education system must change.

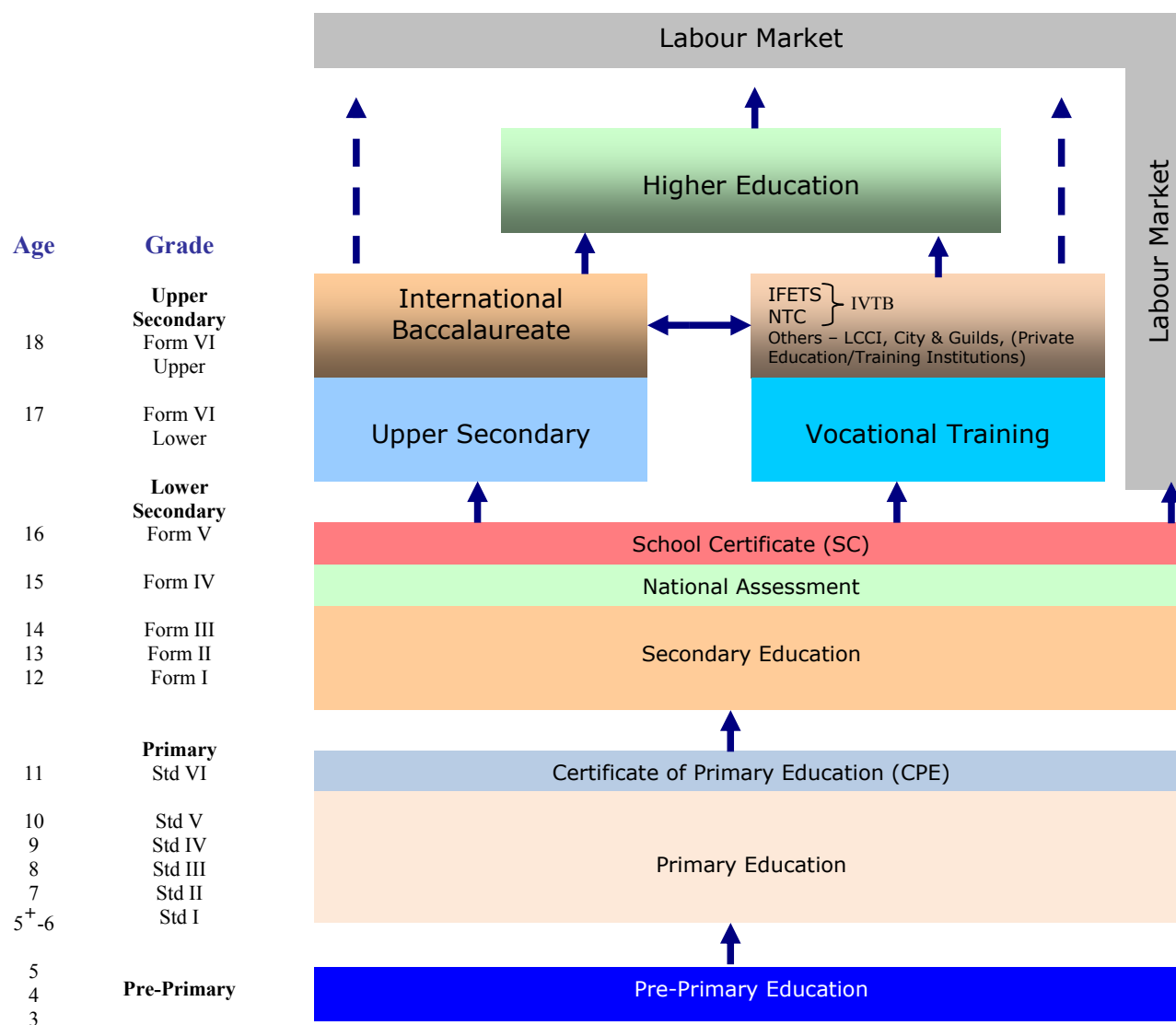
Creating a culture of achievement throughout the current education system requires a different mindset than is currently the norm. It will require moving from a 'one-size-fits-all' culture (through rigid, standardized assessment procedures), to a culture of valuing the individual learning achievements of each and every student. It therefore requires meaningful, process-oriented change within the education system, which in turn requires a level of professionalism and devotion to teaching that is exemplified in respect for each and every student's learning capacity. It requires educators to play an active and a more comprehensive role in each and every student's learning in order to provide the conditions that will enable all students to reach their fullest potential. It therefore requires accountability on the part of educators and school leaders for both the learning environments they provide and the learning outcomes they enable their students to achieve.

The MOEHR will lead this change in creating a culture of achievement. It will lead a national campaign in the coming years to change the culture of the nation's education system. Through conferences, publications, face-to-face meetings and other communications, it will engage in discussions with regional and local government bodies, government officials, educators, students, parents, business and civil society leaders, and other stakeholders to ensure that this vision to create a culture of personal and individual achievement of each and every Mauritian student permeates all levels of society. It will moreover, ensure that the education reform agenda contributes to this cultural shift as Mauritius moves forward towards 2020.

The proposed structure lays emphasis on new pathways and provides a wider range of opportunities for all, as shown in the chart below:

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Figure 5: New Structure of the Mauritian Education System



### *1.6. Transforming the MOEHR*

The EHRSP is a mandate for the transformation of the MOEHR. The new Programme-Based Budgeting (PBB) system demands achievement in return for investment, and it requires a system of performance measurements throughout the educational enterprise – and at all levels of the system - including the MOEHR. In short, it requires an organisational culture change from an input-based annual activity to a performance-based multi-annual exercise that clearly links the funds appropriated by the National Assembly to outcomes and outputs. The PBB thus provides a much needed link between sector strategy, budget policy and the wider reform programme.

The current operating framework of the MOEHR will need to be reconsidered. The current Ministry of Education and Human Resources (MOEHR) was created to focus more holistically on the country's education and training needs. While the MOEHR has sustained its efforts in managing its resources, programmes, and other initiatives, it continues to face many challenges in carrying out its responsibilities in a flexible, timely and unconstrained manner. To ensure success of the EHRSP therefore, it is crucial for the MOEHR to undertake an in-depth analysis of its internal functional and structural procedures.

The transformation of the MOEHR will set the course for a transformation of the whole education system. Ministry officers and staff will be held accountable for the implementation of this internal performance strategy. Performance measures – as well as corrective measures where they are deemed necessary - will be put in place at all levels and a system developed to track action steps related to these strategic objectives for internal achievement, in order to report and celebrate progress.

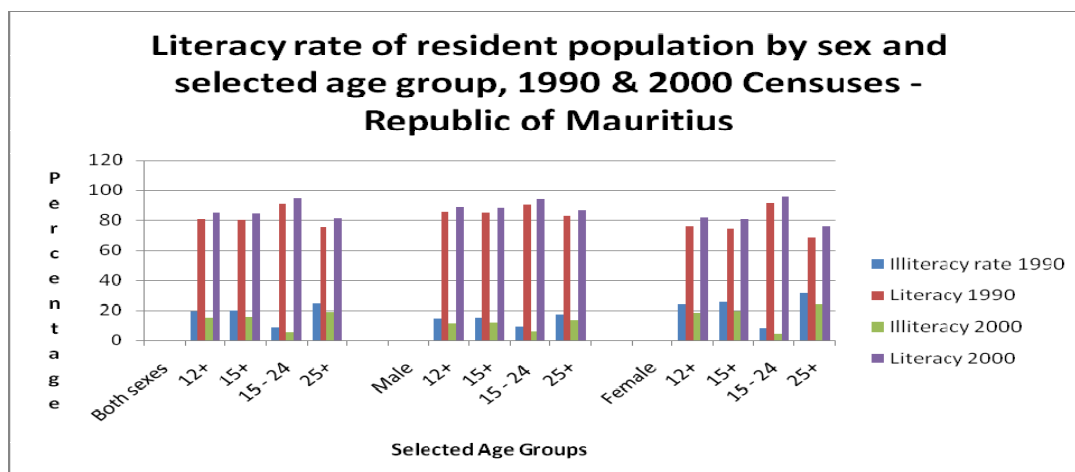
### *1.7. Literacy/Illiteracy Rates*

Overall, the education system of Mauritius is doing well, with the literacy rate remaining at 85%. Many if not most of the indicators are already at very satisfactory levels and over time, they are almost all moving in the right direction, albeit relatively slowly in some cases.

Indicative of this progress are the literacy/illiteracy rates revealed in the last two censuses (1990 and 2000) undertaken in Mauritius, which show clear increases across selected age groups, and for both male and female populations (see Figure 6 below).

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**Figure 6: Literacy rate of resident population by sex and selected age group, 1990 & 2000 Censuses – Republic of Mauritius**



Source: Central Statistics Office, Mauritius

### 1.8. Public Expenditure on Education

Public expenditure on education in Mauritius in 2007/2008 was estimated to be 12 percent of the total Government recurrent budget and 3.3% of GDP<sup>9</sup>. In OECD countries, public spending on education has increased by almost half in real terms over the past decade; today it accounts for 5.0 percent of GDP<sup>10</sup>. Outside the OECD area, investment in education is naturally somewhat lower. Figure 7 below shows Mauritius' public expenditure on education for the different levels for the year 2004 in relation to a cross-section of the upper-middle income countries as well as the overall percentage of GDP spent by each. The World Education Indicators prepared jointly by the UNESCO and OECD show that, on average, public expenditure on education was only 3.8 per cent of GDP in 2004 for the 15 non-OECD countries for which data is available<sup>11</sup>.

In recent years, international organizations (such as the World Bank) have paid less attention to the calculation of public education expenditure as per cent of GDP and more to two new formulas: (a) public primary education recurrent expenditure per primary pupil over GDP per capita – resulting in, for a wide range of countries, a figure close to 10%; and (b) public secondary education recurrent expenditure per secondary pupil over GDP per capita – resulting in, for many countries, a figure close to 20%. Thus, for a wide range of countries, public secondary education expenditure per pupil is around twice that of primary public expenditure per pupil.

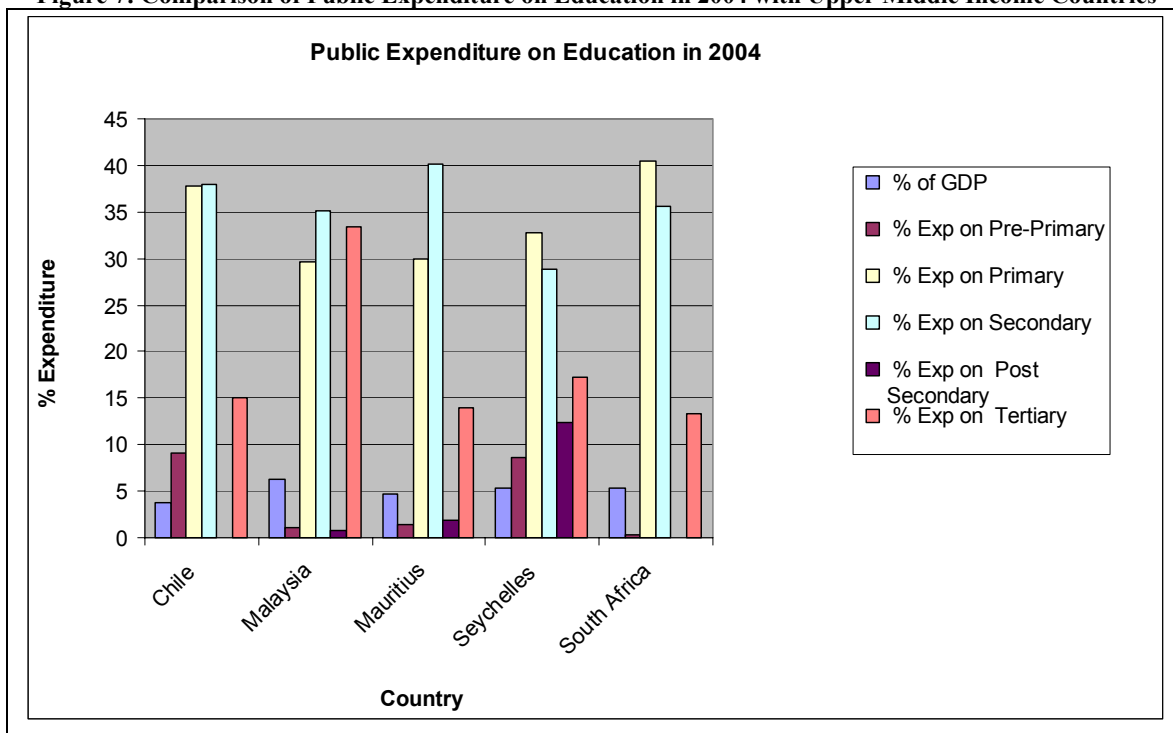
<sup>9</sup> However, if private expenditure (in terms of household expenditure on private tuition for example) on education in Mauritius is taken into consideration, then the country's total financial expenditure on education may be at or close to the international level, but with a substantial proportion of the total not passing through the public education budget.

<sup>10</sup> UNESCO Ministerial Round Table on Education and Economic Development., 19 October 2007

<sup>11</sup> Ibid.

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**Figure 7: Comparison of Public Expenditure on Education in 2004 with Upper Middle Income Countries**



Source: <http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx>

However, in so far as such ratios were computed for Mauritius for 2006-2007, they are: (a) public primary recurrent education expenditure per primary pupil over GDP per capita = 8.6%; and (b) public secondary education recurrent expenditure per secondary pupil over GDP per capita = 19.3%.

Thus, from the above calculations, it is clear that for Mauritius, whereas secondary expenditure per pupil is close to (only just below) the international 'norm', primary expenditure per pupil is well below the international 'norm': in relative terms, it is 14% below what other countries are spending on their pupils in primary schools.

## 1.9. Demographic Trends and Projections

Demographic trends affect the numbers of children who will be entering the education system and are therefore crucial in determining the magnitude of the education provision to be required. Such trends depend directly on the number of live births, which in turn stem from the fertility rate multiplied by the number of women of child-bearing age - data for which are provided to the MOEHR by the Central Statistics Office (CSO) in planning ahead, the needs of the education system.

From the statistical information provided by the CSO, in Mauritius, both the number of live births and the fertility rate have been falling steadily since the year 2000. Recently however, upon the

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recommendation of UNESCO population experts, Mauritius was advised (like all developing countries) to assume that the fertility rate is unlikely to fall below the current 1.85 mark and that it must eventually stabilise and/or start to rise. The CSO has adopted this assumption and predicts that this 'turn-around' will show its effects from the year 2008. They assume therefore that the number of live births will start to rise fairly dramatically from the current low of 16,913 to 20,573 in 2011 - an increase of 21.6% in only four years.

The CSO readily admit that they have no data from Mauritius on which to base this assumption, nor to predict what the future trend may be. It could in fact, fall well below its present relatively low level<sup>12</sup>. Such demographic data and projections therefore, must be treated with considerable caution and the assumed trend (indicated above) may in fact turn out not to be the case. If so, the projections supplied by the CSO will almost certainly prove to be over-estimates and may exceed the actual out-turn figures when these eventually become available. This is clearly an important factor to be borne in mind in terms of the future planning of the education system.<sup>13</sup>

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<sup>12</sup> There are a number of countries that have significantly lower fertility rates than Mauritius currently (including France and Canada) of around 1.4.

<sup>13</sup> Especially since the MOEHR has used population data provided by the CSO to formulate projections of enrolments at each level of the education system up to the year 2016.

## PART II

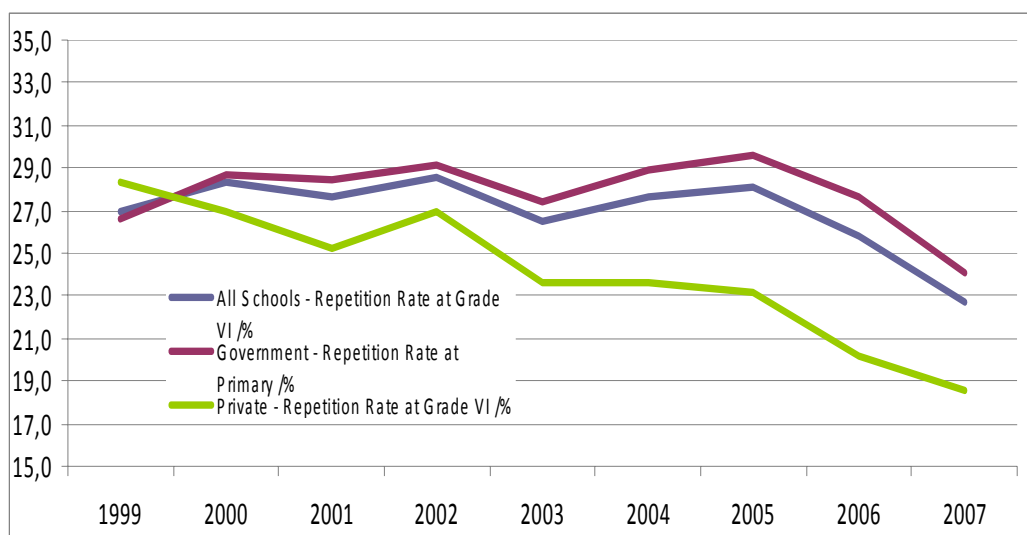
### 2. Inefficiencies in the Current System<sup>14</sup>

#### 2.1. Student Retention, Failure and Attrition

The most cited 'inefficiencies' of the current education system in Mauritius, are the still relatively high (although falling) percentage of students failing and/or repeating the CPE and an alarming percentage of young children leaving (attrition rate) school barely numerate and literate.

In Primary Schools, repetition is insignificant at Grades I-V. Repetition then becomes very significant at Grade VI as a large proportion of those pupils who fail the CPE then repeat the year, with the aim of improving their examination performance the following year. In 2007, 22.8% of Grade VI enrolment repeated the year. They also represented 3.7% of all primary school enrolment. Repetition at Grade VI was significant in both government and private primary schools (see Figures 8 and 9 below), although somewhat higher in the former (24.1% of Grade VI enrolment, against 18.9%).

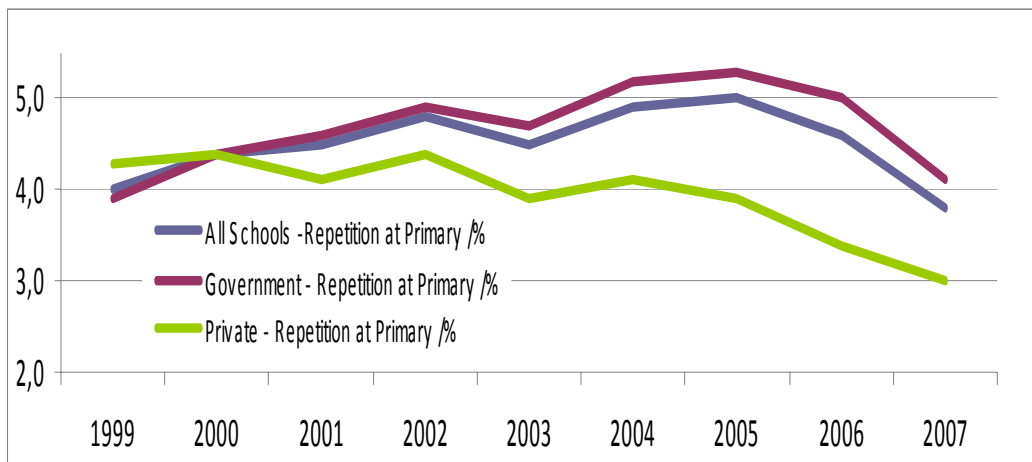
**Figure 8: Grade VI Repetition Rate in Primary Schools, as % of all Grade VI enrolment**



<sup>14</sup> The purpose of this section is *not* to analyze the 'problems' of the system – this has already been covered in depth by local, regional and international organizations and individuals. Rather, the purpose of this section is to draw attention to key issues that define the inefficiencies of the current system and that will direct the focus of the EHRSP for 2008-2020.

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**Figure 9: Grade VI Repetition in Primary Schools, as a % of all school enrolment**



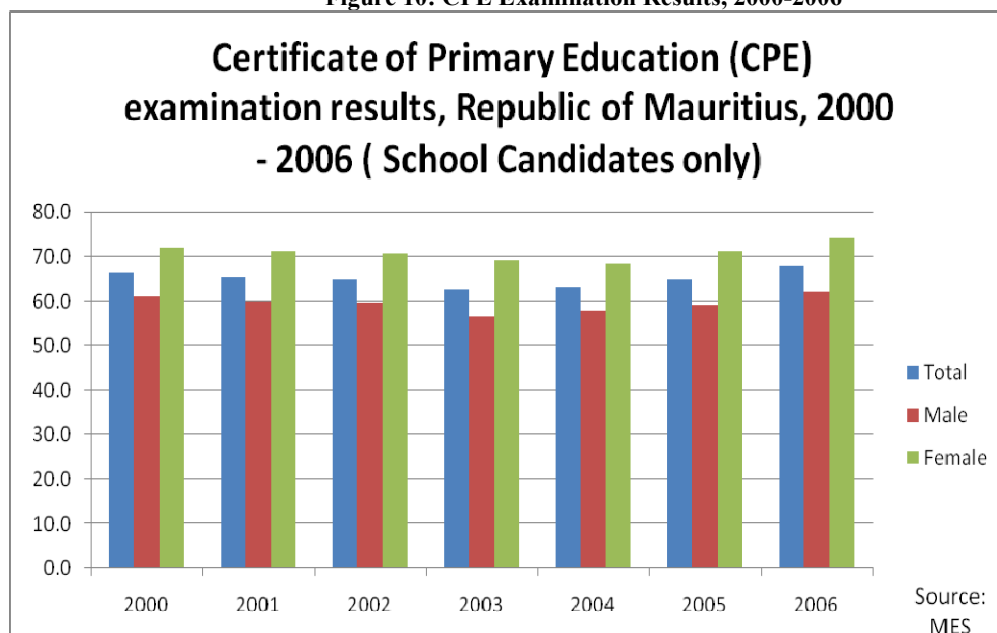
Total repetition at Grade VI level has declined significantly in both 2006 and 2007, down from 28.7% of Grade VI enrolment in each of 2004 and 2005. This relates to the greater availability of places in government secondary schools<sup>15</sup>, with the construction and opening up of more schools. It appears that now only those pupils who have failed the CPE repeat the year, whereas previously repeaters would include some pupils who had passed but with relatively low marks<sup>16</sup>. There is significantly more repetition among boys than among girls, 4.4% of total enrolment against 3.0%.

CPE Pass Rates have improved, albeit quite unevenly (see Figure 10 below), from an overall figure for school candidates of 64.3% in 1999 to 67.9% in 2006, with the performance of girls far exceeding that of boys (74.3% pass against 62.0%).

<sup>15</sup> Which are generally favoured over private schools.

<sup>16</sup> And who preferred to repeat with the hope of getting a better score and in turn getting into a 'better' secondary school.

Figure 10: CPE Examination Results, 2000-2006



Source: MOEHR

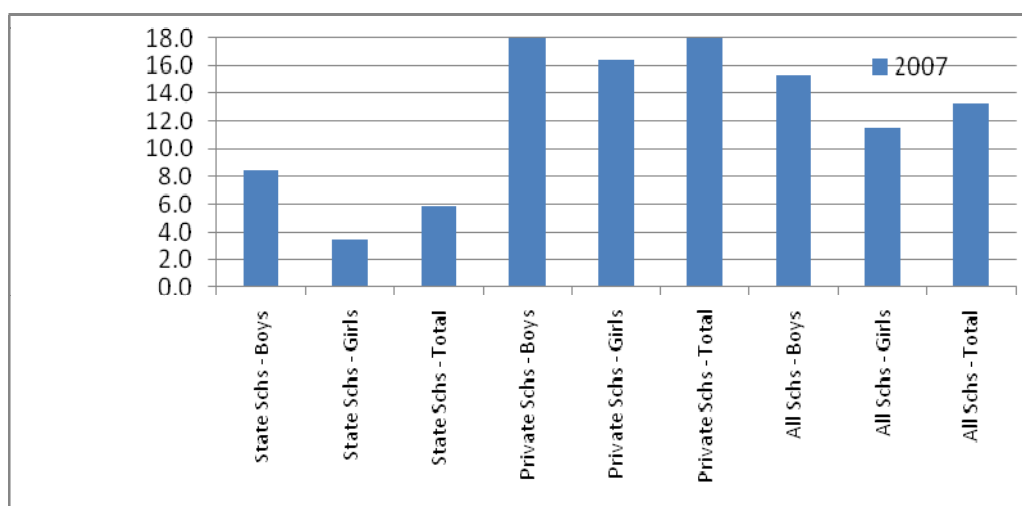
With regard to the second sitting candidates, their pass rate of 40.4% in 2007 is significantly less than the 55.9% recorded in 2000, presumably due to the fact indicated above, that only the CPE failures attempt to re-sit the examination.

If only the school candidates' first sitting is considered, then, of the total 76.2% who pass, the pass rate for boys is 71.3% and that for girls is 81.2%. Of the 23.8% who do not pass, they almost all re-sit the examination the following year and 40.4% of these manage to pass (after the second sitting). Therefore, the proportion of the cohort of children who will eventually go on to secondary mainstream education and in many respects this seems the more appropriate indicator to use for that cohort of children, their eventual pass rate is around 86%.

Repetition is a significant factor in private secondary schools (see Figure 11 below), but much less so in government schools, with 16.1% of total enrolment against only 5.4% (because government schools attract the brighter students). Repetition is more common for boys than for girls, 13.6% against 11.0% and is particularly pronounced at Form IV and Form VI.

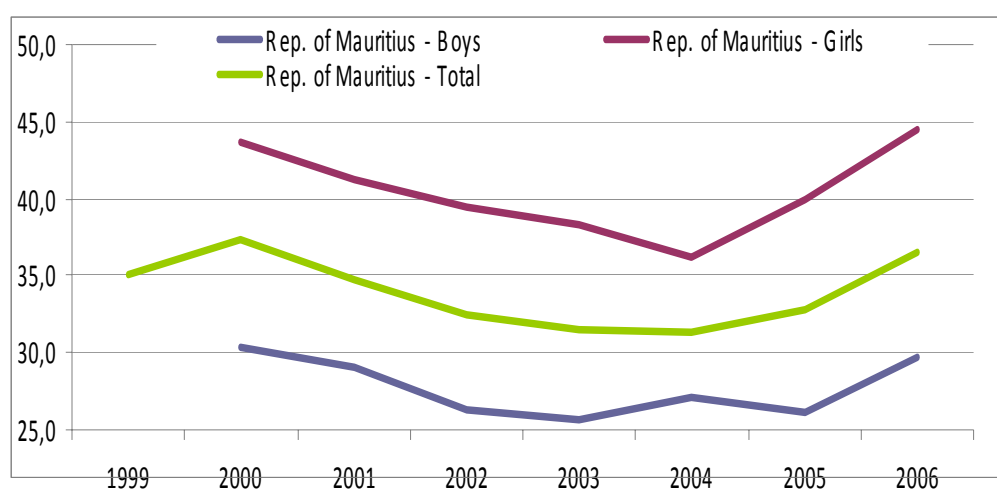
## EDUCATION & HUMAN RESOURCES STRATEGY PLAN 2008-2020

**Figure 11: Secondary (Mainstream) Repeaters, as % of enrolment**



Achieving positive student outcomes by gearing courses more to individual needs, is evidenced by the performance of ZEP schools in CPE examinations. Although such performance has only started to improve recently (see Figure 12 below), from an overall pass rate of 31.4% in 2004 to 36.5% in 2006, such efforts seem to have had an impact already. However, this impact is complicated by the fact that there is a wide variety of results between individual ZEP schools and once again, pass rates for girls are much higher than those for boys (44.5% against 29.7% respectively).

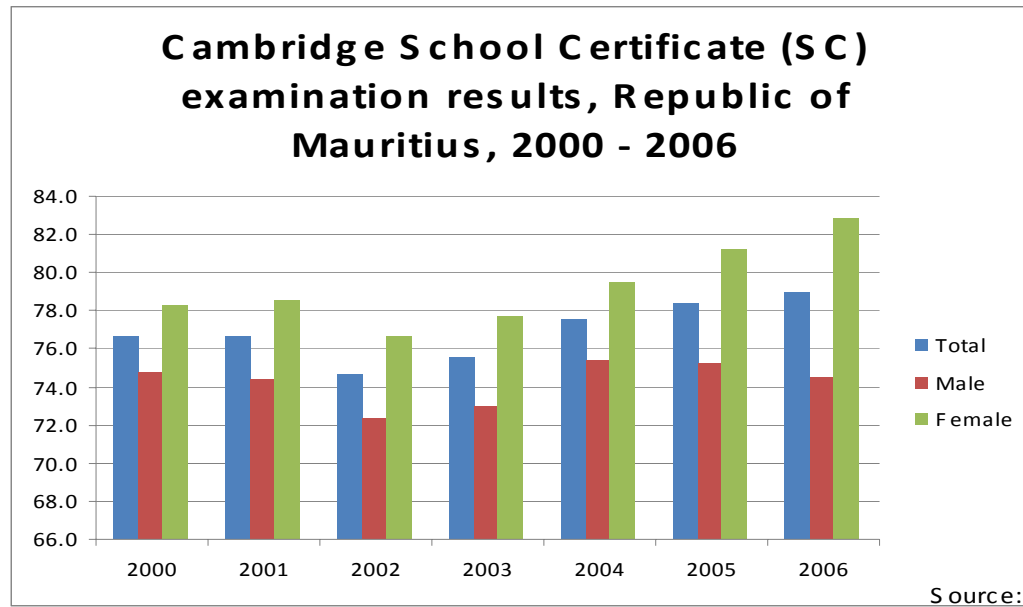
**Figure 12: Performance of ZEP Schools for CPE (% passed)**



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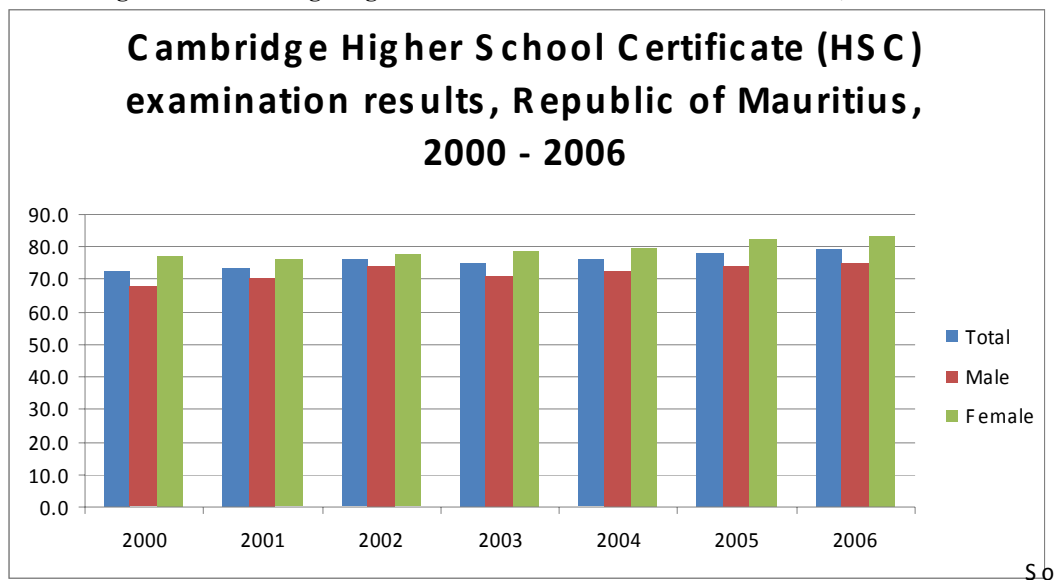
With regard to the overall School Certificate, pass rates rose from 72.3% in 2002 to 74.5% in 2006 (see Figure 13 below), with significantly higher pass rate (once again) for girls than for boys (82.8% against 74.5% respectively).

**Figure 13: Cambridge School Certificate Examination Results, 2000-2006**



Likewise, the overall Higher School Certificate pass rate rose from 73.9% in 2002 to 74.9% in 2006 (see Figure 14 below), with significantly higher pass rate for girls than for boys (83.1% against 74.9%).

**Figure 14: Cambridge Higher School Certificate Examination Results, 2000-2006**



### *2.2. Quality of Teaching and Learning*

The situation described above is a reflection of the quality of assessment and the quality of teaching. Standardized assessment procedures (such as those currently being undertaken through the CPE, SC and HSC examinations) can be criticised for not identifying the quality of student-learning. The current Mauritian education system is heavily dependent on quantifiable student learning-outcomes.

One way to solve this problem - especially in terms of alleviating the pressure 11 and 12 year-old youngsters face at the end of primary school with having to undertake the CPE hurdle – is to change the purpose of end –of- primary cycle examination from that of being a selection exercise for admission to secondary school to a record of achievement for each pupil.

The problem described above is a by-product of the educational system. What is important in any educational process is the quality of education – and this is largely a function of the teaching quality and personal qualities and motivation of teachers.

The choice of the language of instruction used in school is of utmost importance. This is an issue that needs attention in Mauritius especially in view of its specificity and also the socio-economically disadvantaged areas where both family and community exposure to the English language (the ‘official’ language of instruction – and assessment – in schools) is limited, and also, more broadly throughout the Republic (especially at pre-primary and primary levels) where teachers often resort to Mauritian Kreol and other languages of the environment, including Bhojpuri, to “facilitate learning”.

Facilitation of learning through the use of a language other than the ‘official’ language of instruction, which is also the ‘official’ language of assessment, will have to be the subject of a broad based national consultation before policy decisions are taken.

### *2.3. Approach to Achievement*

As student outcomes are measured by standardized tests, as the predominant form of measuring learning outcomes in Mauritius, and since changing this approach to measuring achievement is dependent on building trust, confidence and respect in the education system as a whole (as defined through teachers and teaching quality; assessment and assessment procedures; and the like), such a change will require a long-term investment (in terms of time and effort). The question then for this EHRSP is what can be done in the short-term to start effecting such change (noting here that one of the goals for 2020 is confidence-building in the education process in Mauritius)?

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Two issues indicated above that can immediately be addressed to help build the foundations for the success in achieving the EHRSP Objectives for 2020 are: first, increasing overall student performance measures (especially at CPE); and second, increasing boys' achievement and performance (and especially during the formative primary-school years).

From the statistics regarding pass/failure at CPE and in other examinations, there is a clear gender disparity taking place in Mauritius (in favour of girls). Studies show that girls often out-perform boys even in educational systems where competition is not as fiercely competitive as in Mauritius.

With regard to increasing overall student performance measures, if one simply focuses on the statistics and looks at the pass-rate for CPE over time, then one could conclude that the system is not doing too badly since the statistics show that the examination scores are improving over time.

The fact remains that no matter to what degree CPE results are made to improve over time and in the long-term, failure rate, attrition and drop-out rates must be addressed in the short-term. Under current assessment procedures, the only way to increase overall student performance measures is to ensure that such performance measures are actually achieved by students. Such performance-enabling 'techniques' are possible – in the short-term – by focusing on making do with what exists, produce better results without 'shocking' the system with too much change initially; and while at the same time, in parallel, working towards long-term cultural change.

### 2.4. *Branding and Labelling*

As selection of students by schools (and vice-versa) is one of the key determinants of competition within the education sector in Mauritius, it is necessary to highlight the impact of selection not only on student assessment outcomes, but also, on the future learning progression of students. Furthermore, the fierce competition that defines the education sector (especially with regard to the transition from primary to secondary levels), is a direct result of the branding and labelling of both students and schools, which in turn directly impacts the demand placed on the system (both schools and students, and in turn, parents), and which further impacts and directly contributes to the perpetuation of the 'perceived' need (by students and parents) for increased 'private' tuition<sup>17</sup>.

In short, a cycle of interchangeable impacts to the system (demand-branding/labelling-regular in-class teaching quality-private tuition) have become so strongly linked – they have become entrenched within the school 'culture' and the mindset of teachers, parents, students (and even policy-makers) that it will

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<sup>17</sup> In *The Adverse Effects of Private Supplementary Tutoring – Dimensions, Implications and Government Responses*, by Mark Bray, IIEP/UNESCO (2003), one of the country case studies presented is Mauritius.

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present this EHRSP 2020 with its greatest challenge. Perhaps, a good place to start is to understand the concept of 'demand' (which is the root cause of the other impacts mentioned above).

As mentioned above, changing this school 'culture' will be one of the greatest challenges for the education system in the coming years as achieving the goals established for this EHRSP will, to a large degree, depend on finding a way to change this mindset.

Perhaps, one of the most interesting outcomes of the philosophy upon which the education methodology for ZEP schools is based is the social outcomes it has achieved. In the case of ZEP schools, what needs to be removed is the negative branding/labelling but without losing the added value it has provided to the education system. In other words, the spotlight with regard ZEP schools must be taken away from 'failure' by promoting measures to enhance the 'successes' of ZEP students and schools.

The challenge for the EHRSP therefore, is to ensure that the 'innovative practices' existing elsewhere and also put in place in ZEP schools are spread throughout the system in order to avoid inequities and disparities.

With regard to SEN, until 2006, there was an absence of a comprehensive policy on special needs education<sup>18</sup>. Even when education was made free and government was funding a few special education needs schools, it was still very difficult for all children to have access to special education needs institutions. A contributing factor to this was also the fact that there was not (and still currently is not) any clear and precise data indicating the number of children in Mauritius requiring special educational provision, let alone the numbers in the various SEN categories<sup>19</sup>.

Although great strides have been made in addressing the issue of access to schools for children with special educational needs due to disabilities<sup>20</sup>, there are still many other children who cannot attend SEN mainstream schools or Specialized Schools because: (a) there is no SEN school which can cater to their needs in the region where they live; (b) they are on the waiting list of the existing SEN schools which have limited seat capacity as well as limited human, material and financial resources; (c) they are not informed of possible existing educational facilities; and (d) educating the child with special needs is perceived not to be important.

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<sup>18</sup> It is noted here, that the 2006 "Special Education Needs and Inclusive Education in Mauritius - Policy and Strategy Document", is the result of broad consultations carried out by the five Technical Committees set up in 2005 by the Special Education Needs Unit of the MOEHR, many of the committee members having already contributed to the Recommendations for Special Needs Education by the Task Force that was set up in 2001.

<sup>19</sup> The Ministry of Social Security, in 2004, surveyed approximately 3000 children under 18 years old with disabilities (that is, 1% of school-aged population). Their special needs are due to disabilities ranging from specific deficiencies such as motor, physical, visual, auditory, intellectual or combined and multiple handicaps as a result of birth defects, illness or accident.

<sup>20</sup> See: SEN Policy and Strategy Document, MOEHR, 2006.

It is therefore of utmost importance that SEN policy guidelines and strategic framework move forward immediately along specifically defined goals and targets for each year so that by 2020, all SEN children in Mauritius will be enjoying access to relevant, high-quality provision.

### *2.5. Flexible and Integrative Structures*

The importance of building flexible and integrative structures that encompass both the education and training sectors across all levels of the system is of vital importance if Mauritius is to achieve the EHRSP 2020 Objectives.

This will require the concerted effort by all stakeholders in first of all, designing and developing a qualifications framework that responds to national specifications, but has the ability to also encompass regional and international prerequisites.

Institutions will need to be provided with the conditions to use these tools correctly, and develop them further to enhance student-centred and flexible learning, as well as greater mobility (both vertically and horizontally) across the system. Increasing dialogue with employers is again required if the educational and training provision, at all levels, is to meet the needs of a society and economy in which knowledge becomes rapidly out-of-date and in which, therefore, constant training and re-training is required. Through addressing these lifelong learning challenges, education and training institutions can also tackle the social objective of ensuring equality of access to education for all those qualified and able to benefit from it.

Learning one set of skills at school, technical college or university is no longer enough to carry people throughout their working life. But there is one basic skill that is becoming increasingly important in today's fast-changing technological universe: being able to learn and adapt to the new skills and training that will be required. But learning to learn is not enough; people also need to be sure that they acquire new skills during their careers as efficiently as possible – and that means ensuring that qualifications systems give them credit for the experience and knowledge they have gained, whether in the classroom, in the workplace or elsewhere.

The main difficulty arising from this is how national qualifications systems can be used to promote lifelong learning in terms of quantity, quality, efficiency and equitable distribution of learning opportunities, the quest for more and better flexible and integrative structures to promote lifelong learning, there is a growing awareness that isolated developments in qualifications standards lead to uncoordinated, piecemeal systems. Most countries have now started to develop broad systemic approaches to qualifications.

# PART III

## 3. The Strategic Framework

### **3.1. THE EARLY CHILDHOOD CARE AND EDUCATION (ECCE) SUBSECTOR--BUILDING SOLID FOUNDATIONS FOR LEARNING**

#### **3.1.1. Situational Analysis**

Free education in Mauritius concerns mainly the whole of the Primary, Secondary sectors, and the tertiary sector partially. Primary education as from age 5 was already in place offered free to everyone since the pre-independence period, while secondary education became free in 1977.

Early Childhood Care and Education has been traditionally offered by private providers. As such there has been wide disparity in pre-primary education in Mauritius. Besides disparity in the quality of education provided in this sector, there has also been wide disparity in the cost of schooling and qualification of the teaching personnel in those schools. This created an unfair advantage for a few who could afford better equipped and staffed schools. Those benefitting from the support of the home had a head start. Children deprived of pre-primary education were at a disadvantage as primary schools could not really compensate for the lack of readiness for primary schooling.

In 1984, the Pre-School Trust Fund (PSTF) was set up with the responsibility for promoting and providing pre-school education and services in the Republic of Mauritius. Its functions encompassed, among others, the registration of preschools, supervision of educational activities and teacher education. With the emerging challenges on the international scene, the need to establish a new framework that would reposition the pre-primary sub-sector and secure a strong foundation for the young child was strongly felt. The Early Childhood Care and Education Authority (ECCEA) which replaced the PSTF in 2008 aimed at bringing a more efficient inter-sectoral service delivery that would contribute to strengthen the foundation of ECCEA programmes in Mauritius, thereby preparing for the emergence of a 'Centre of Excellence' that would serve the region, especially countries that are already engaged in promoting ECCEA as part of the Education for All (EFA) Goals.

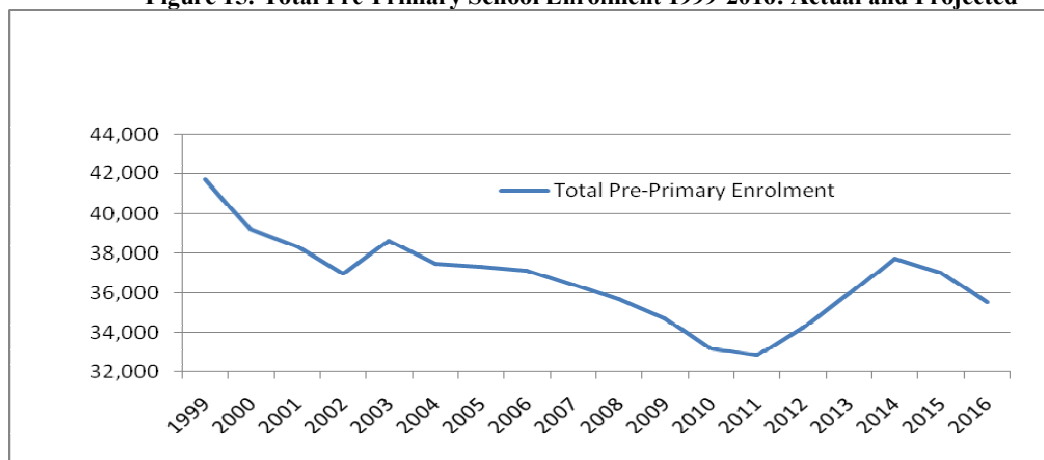
In order to regulate the sector, registration of pre-primary schools started in 1993. The decision to set up pre-primary classes was also taken. In 1996, 43 Pre-Primary schools were constructed in the Primary school compound with the help of finance from World Bank. 58 schools were set up under the

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administration of Municipalities and Village Councils. From 2000 to 2003, six public pre-schools have been constructed in the least developed regions. The total number of schools in 2007 number to 1,115, of which 181 (16%) are attached to primary schools and 934 are private (including Local Authorities) pre-primary schools. All schools operate independently in line with the Pre-School Regulations. Enrolment in pre-primary schools continued to increase and in 2007, 31,141 children of age 3 plus were registered in the pre-primary schools, leading to a Gross Enrolment Ratio of nearly 94 percent. Equitable access of children to pre-school education is ensured through a monthly per-capita grant of Rs200.- payable to all children of 4 years plus.

Enrolments at Pre-Primary level currently total 36,421 but have been declining since 1999 when enrolments numbered 41,711. They are predicted to continue to decline, reaching 32,900 by 2011 – an overall decline of 26.8% - after which there will be some increase in births (according to the CSO), but rather unevenly, until eventually a further decline, from 2014 onwards (see Figure 15 below).

**Figure 15: Total Pre-Primary School Enrolment 1999-2016: Actual and Projected**

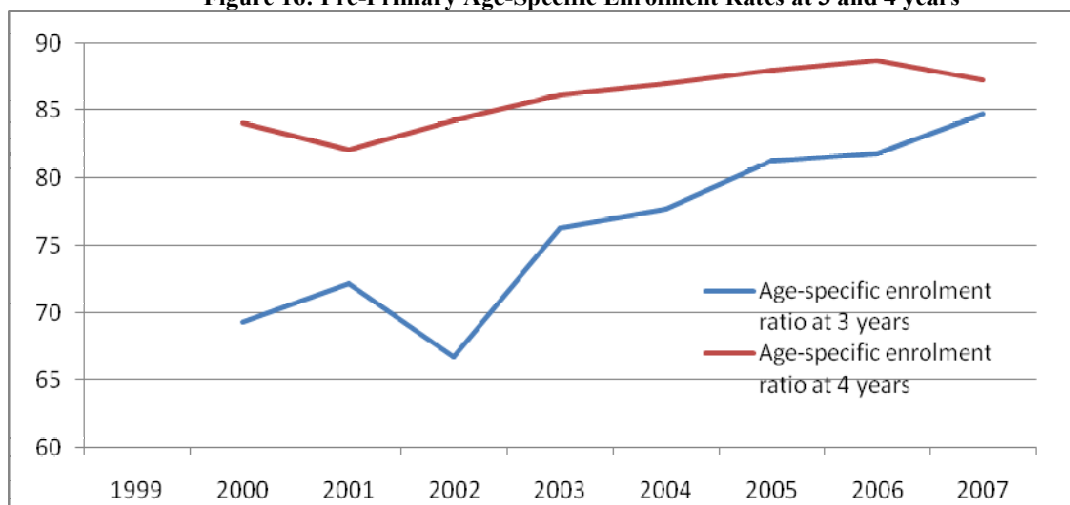


Pre-Primary enrolments depend on demographic factors but also on the age-specific enrolment rates at age 3 and age 4<sup>21</sup>. The age-specific enrolment rates both at age 3 and at age 4 have been rising, albeit unevenly, since 2002, reaching in 2007, 84.7% for age 3 and 87.3% for age 4 (see Figure 16 below). Thus, it is still the case that, respectively, 15.3% of 3-year-olds and 12.7% of 4-year-olds are not enrolled in pre-primary schools, and there can be little doubt that these children come from the poorest and most disadvantaged families. These out-of-school children were about 5000 in number.

<sup>21</sup> But *not* on enrolment rates at age 5, since by that age the great majority of the children, 85.5%, in this age-group are already in primary schools.

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Figure 16: Pre-Primary Age-Specific Enrolment Rates at 3 and 4 years



The qualifications of the teaching staff in the sector have always been a matter of concern; schools already operating were providing pre-school education before any uniform regulations were set up. Owing to a lack of regulation, it had become an outlet for jobs for many who could not otherwise join the Primary Sector, the latter being well regulated by the Government. In order to enhance the quality of teaching in the pre-primary sector, by 2000, training programmes were mounted for Pre-School educators. Owing to the lack of basic qualifications of the pre-school personnel, a proficiency training programme was instituted for existing educators, allowing them to complete a Teacher's Certificate (Pre-Primary). Capacity building for the supervisory grade is being undertaken.

### 3.1.1.1. Policies

Today the Government recognises the pivotal role played by pre-primary education in building the foundations upon which all future learning ultimately depends. In line with the policy of inclusion, all poor children of pre-primary school-going age should attend school and be provided with the necessary accompanying measures to sustain their retention in schools.

It also acknowledges the importance of involving parents, family and community, while at the same time reinforcing partnerships with NGO's and local, national and international agencies, in promoting a holistic approach to ensuring the child's development, education and protection. As such, it abides by the guiding principles of the Early Childhood Development (ECD) – the first of the six EFA Goals adopted by the World Education Forum (UNESCO 2000) – and has set these as part of its National Policy in favour of the child and as a Priority Programme within this Plan.

Pre-primary school being the most essential starting point as it lays the basis for all future education; the government is also committed to providing more attention to this sector through the provision of training

as well as development of a solid base for education through the additional resources for research and development of the sector.

### **3.1.2. Overall Goal**

Government is committed to ensuring that ALL children aged 3 to 5 years in Mauritius should have the opportunity to develop their individual intellectual, socio-emotional and psycho-motor skills to the best of their capacity in order to build the confidence and self-esteem in learning that will not only prepare them for the next level (primary school) but more importantly, lay the foundations for learning that will support them throughout their lifetime.

### **3.1.3. Critical Challenges**

1. Address the problem of out-of-school children in the age group due to absolute poverty
2. Ensure a proper regulatory framework is in place with suitable norms and standards to overcome disparity in pre-schools.
3. Adopt pro-active measures for the early detection of children with special needs and addressing these.
4. Adapt the Curriculum to ensure readiness for primary school.
5. Ensure professional development at all levels.

### **3.1.4. Strategic Goals**

1. Review legislative and regulatory framework for the provision of ECCE
2. Ensure access of all children aged 3 to 5 years to pre-primary education.
3. Establish a network for a holistic approach to ECCE
4. Improve the quality of learning environments
5. Embed technology in the system
6. Undertake regular review of curricula
7. Ensure that all pre-primary educators are fully trained and qualified.
8. Encourage and support the inclusion of children with special needs and those from disadvantaged socio-economic backgrounds.
9. Foster research and development in ECCE
10. Enhance professional development for the general improvement for early childhood education

### **3.1.5. Summary of Strategic Activities**

Early Childhood Care and education should undergo gradual professionalisation. It is a historical fact that this sector has received little attention so far. However, government is fully conscious of the necessity to develop a strong base for education from early childhood, the need to check and eliminate loss of potential in our children through neglect, the need to gradually empower all those in the sector, as well as the need to have strong regulations so that the ECD does not remain a marginalised sector. The early childhood education and pre-primary education will be made compulsory for all children aged 3 to 5 years. The regulatory and institutional framework will be enhanced with the coming into operation of the ECCEA.

This plan sets out to identify those key areas and provides for strengthening them so as to optimise all the resources that already exist, as well as providing for additional resources for areas such as research and development that would feed back and further strengthen the sector. It also places emphasis on networking and the involvement of a wide range of stakeholders in the development of education right from a very young age. Emphasis will also be placed on the development of a strong Quality Assurance mechanism.

Our prime objective is to ensure that all children start primary schooling on an equal footing and a degree of readiness that enable each child to make the transition to primary schooling on the right footing. Government wishes, through its action and commitment, to ensure that parents also develop a new consciousness for placing emphasis on quality education right from the start.

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### 3.1.6. Activities and Target Indicators

<b>Strategic Goals</b>	<b>Strategic Objectives</b>	<b>2008-2020 Target /Indicators</b>	<b>Activities</b>
<b>1. Review legislative and regulatory framework for the provision of ECCE</b>	1.1 Establish an Early Child Care and Education Authority (ECCEA)	Mandate and personnel defined and identified by end 2008	Setting up of ECCEA.
	1.2 Develop regulations, instructions and manuals for the operation of pre-primary units.	Criteria established, communicated and finalized by end 2008	Review regulations, instructions and manuals for operation of pre-primary schools
	1.3 Establish quality criteria and standards of operation and service delivery across the pre-primary sector.	Criteria established, communicated and finalized by end 2009	Review and finalisation of criteria
	1.4 Ensure that special provisions are made for children with special needs, children from disadvantaged socio-economic backgrounds and learning difficulties.	Provision completed and all stakeholders informed by end 2009	Taskforce for Special needs set up
	1.5 Ensure a system of reporting and accountability at all levels	System in place - 2009	Review of system and guidelines set up
	1.6 Make pre schooling compulsory to all children as from age 3	Regulations in place by end 2009 Operational 2010	Legal framework developed and legislations passed

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<b>Strategic Goals</b>	<b>Strategic Objectives</b>	<b>2008-2020 Target /Indicators</b>	<b>Activities</b>
<b>2. Ensure access of all children aged 3 to 5 years to pre-primary education.</b>	2.1 Undertake pre-primary school/unit mapping survey to identify communities with limited access to state pre-primary facilities.	End 2009	Survey initiated
	2.2 Construction of new 'model' pre-primary units and support services within primary schools – priority to be given to communities with limited access.	Plans completed and agreed and implementation by end 2009	Planning and budgeting to set up pre-primary units in primary schools from 2008.
	2.3 All children aged 3 to 5 years to be enrolled in pre-primary schools/units.	All children enrolled by 2010	Provision for resources to ensure 100% enrolment and retention under the Eradication of Absolute Poverty(EAP) Programme
	2.4 Setting up of Special Education Units in priority areas	Units operational as from 2010	Project developed and budgeted
<b>3. Networking for a holistic approach to ECCE</b>	3.1 Prepare an awareness raising campaign to 'bridge the gap' between home and the pre-school	Campaign operational by beginning of 2009	Campaign developed and initiated

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<b>Strategic Goals</b>	<b>Strategic Objectives</b>	<b>2008-2020 Target /Indicators</b>	<b>Activities</b>
	<p>3.2 Strengthen partnerships and a proper networking system with the community, including non-governmental agencies and the business community.</p> <p>3.3 Develop a Parent-Child Counselling network with other Ministries offering support for health, social, and protection services</p> <p>3.4 Set up and support Parent Advisory Committees in each zone</p> <p>3.5 Develop a comprehensive Family Support Strategy (FSS) for parents living in the least developed areas.</p>	<p>Partnership operational: 2009: 10% schools 2010: 50% schools 2011: 100% schools</p> <p>Operational on a pilot basis as from 2009. Fully operational in 2011.</p> <p>Committee set up and fully operational by mid 2010</p> <p>Strategy defined and operational on pilot basis as from 2009-extended gradually and completed by 2012</p>	<p>Partnership defined and operational on pilot basis in more needy areas as from 2009</p> <p>1. Network defined and stakeholders informed. 2. Operational plan developed and implemented.</p> <p>Taskforce for setting of and dissemination of information.</p> <p>Taskforce to defined and operationalise FSS</p>
<b>4. Improve the quality of learning environments</b>	<p>4.1 Provide financial and material support to increase the capacity of pre-school units in primary schools.</p> <p>4.2 To ensure availability of play materials and equipment in all schools by 2015.</p>	<p>Funds available by 2009, schools identified and plan fully operational by 2010</p> <p>Schools identified and gradually implemented as from 2008</p>	<p>1. Taskforce to identify priorities. 2. Costing and implementation strategy developed</p> <p>Budgeting and phased implementation</p>

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<b>Strategic Goals</b>	<b>Strategic Objectives</b>	<b>2008-2020 Target /Indicators</b>	<b>Activities</b>
	4.3 Ensure that outdoor space areas and playgrounds are in accordance with the requirements of the Ministry of Education and of Health by 2010.	Standards communicated and all schools required to align by 2012.	Standards developed and communicated to all schools.
<b>5. Embed technology in the system</b>	5.1 To expose young learners to modern technology for familiarization purposes	Schools equipped with IT facilities by end 2009	1. Train teachers in ICT  2. Encouraging pre-schools to use ICT as a tool in the teaching/learning process
<b>6. Undertake regular review of curricula</b>	6.1 Review and regular update of guidelines and outline of curricula for all pre-primary sector.  6.2 Strengthening of Supervisory staff of the ECCEA	A mechanism for curriculum supervision and monitoring is set by the ECCEA by end 2009  Provision for professional support by end 2008	Setting up of system of curriculum supervision and monitoring  Professional support system developed
<b>7. Ensure that all pre-primary educators are fully trained and qualified.</b>	7.1 Enhance training opportunities	Training opportunity extended to 100% educators by 2012	Improve capacity of MIE to offer courses through multiple modes, including Distance

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Strategic Goals	Strategic Objectives	2008-2020 Target /Indicators	Activities
	7.2 Accelerate the implementation of in-service training programmes for teachers as from April 2008	100% of teachers have Certificate in Education by 2012	Improve capacity of MIE to offer training using multiple modes
	7.3 Develop a database for the pre-primary sector for training purposes.	Database operational by mid 2009	Commission building of database
	7.4 Operate a Resource Centre as part of the ECCEA	Resource centre fully operational by end 2009	Provision of space and resources for Resource Centre
	7.5 Develop a policy for language incorporating bilingualism/multi-lingualism in early childhood education.	Policy discussed, approved and operational by end of 2009	Establish clear guidelines and disseminate same to all stakeholders.
	7.6 Provide training for trainers on bilingualism /multi-lingualism	Personnel trained as from 2009	Training on bilingualism/multi-lingualism
<b>8. Encourage and support the inclusion of children with special needs and those from disadvantaged socio-economic backgrounds.</b>	8.1 To ensure that infrastructure are adapted to meet the needs of children with special needs.	Operational in 2009	Setting of norms and communication to all stakeholders
	8.2 Set up a mechanism to detect children with learning difficulties for remedial	Mechanism in place in 2009	Professionals in the field identified and mechanism

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<b>Strategic Goals</b>	<b>Strategic Objectives</b>	<b>2008-2020 Target /Indicators</b>	<b>Activities</b>
	<p>action.</p> <p>8.3 To provide for an adapted curriculum for special needs.</p> <p>8.4 Formulate criteria to evaluate school readiness of the child</p> <p>8.5 Improve capacity to offer training for special needs in the sector</p>	<p>Piloted 2009 Generalised by 2010</p> <p>2009:Criteria defined, communicated 2010: piloted 2011: operational</p> <p>Capacity building completed by end 2010</p>	<p>developed</p> <p>Curriculum panel set and curriculum developed</p> <p>Panel to develop and pilot criteria</p> <p>Carry needs assessment and build capacity accordingly</p>
<b>9. Foster research and development in ECCE</b>	9.1 Develop a strong base for research through setting up of a Child Study Centre.	Child Study centre put in place and operational in 2009	Child Study Centre developed at the MIE.
<b>10.Enhance professional development for the general improvement for early childhood education</b>	10.1 Develop strong professional support for ECCE- curriculum development/ training and development through the employment of a professional cadre – fully qualified at Master's or Doctorate level at the MIE	Professionals employed in 2009	Employment of Professionals for ECCE at the MIE, to advise, monitor and provide professional inputs at training, research and development

## 3.2. THE PRIMARY EDUCATION SUBSECTOR--REINFORCING CONFIDENCE IN LEARNING AND ACHIEVEMENT

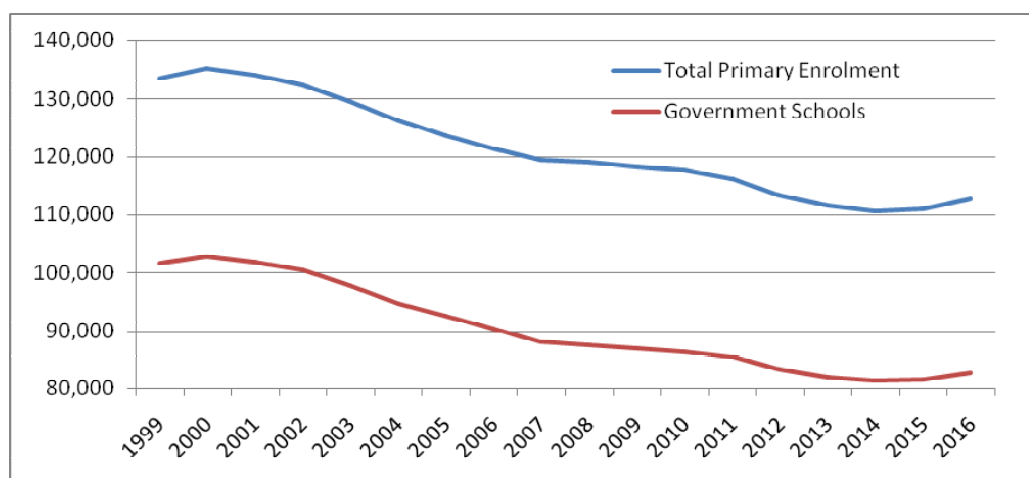
### 3.2.1. Situational Analysis

Mauritius has achieved the goals of universal primary education and gender parity in enrolment. This is the result of government's impetus for free primary education for all (which started in the 1940s) and which was heightened after independence in 1968.

The Gross Enrolment Rate (GER) has stabilized over the last decade to reach 102 percent in 2007 and Net Enrolment Rate (NER) has gradually improved to reach 97 percent with a gender parity index of 1.0. The survival rate to the last grade of primary schooling is about 98 percent. These indicators show that the education system is operating effectively at the primary level and Mauritius compares favourably with other countries in the African region in the achievement of the EFA goal in terms of provision of access to free and compulsory primary education to all children.

Total enrolment in primary schools has been declining since the year 2000 from 135,237 to 119,310 in 2007, on account of demographic factors, and is predicted to continue declining to the low figure of 110,599 in 2014<sup>22</sup> before thereafter increasing slightly (see Figure 17 below). The Net Enrolment Rate (NER) in primary schools is close to, 100% and is generally regarded as not a matter for concern, especially since there must be some degree of approximation in the population figures, which have been projected forwards from the last national population census in 2000.

Figure 17: Primary School Enrolment 1999-2016: Actual and Project

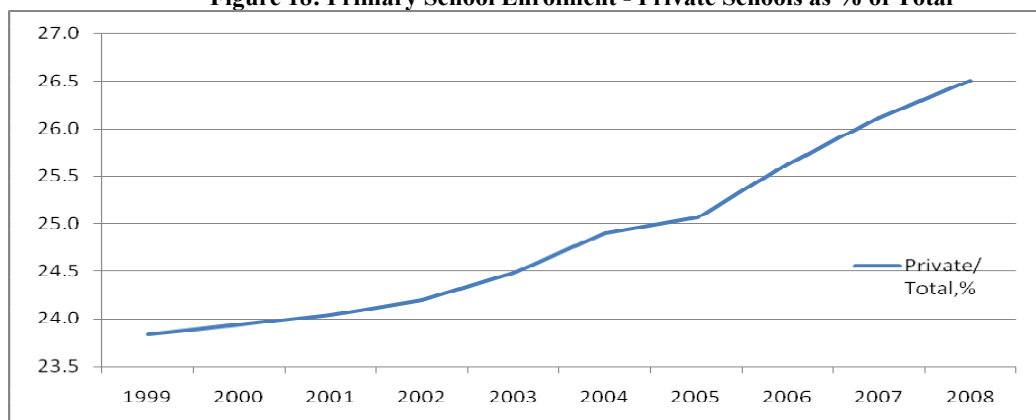


<sup>22</sup> A decline of 18.2% since 2000.

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Of all primary school enrolments in 2007, 73.9% were in government and 26.1% in private schools, but the proportion in private schools has been increasing steadily over time since 1999. Interestingly, as the numbers in primary schools in total have continued to fall, the decline has been concentrated solely in government schools, with the numbers enrolled in private schools remaining more or less constant (see Figure 18 below).

**Figure 18: Primary School Enrolment - Private Schools as % of Total**

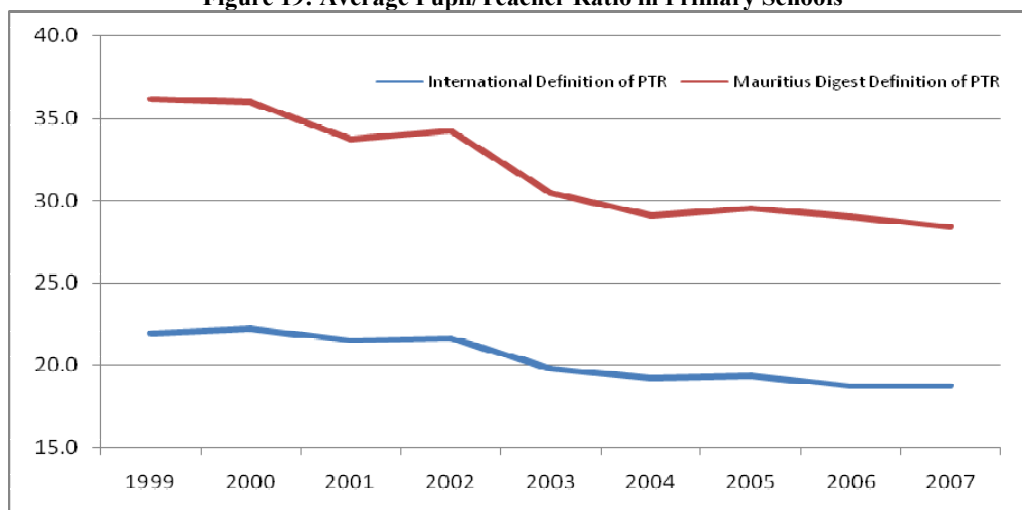


The MoEHR allocates about one-third of its budget to the primary sector and this is translated in an equitable allocation of human and material resources among schools in the education zones. The MoEHR has a policy of free textbook provision to all children. The majority of teachers at the primary education level are government employees. The MoEHR is committed to improve teaching quality through upgrading of teacher qualifications and to invest in teacher training. The average class size in primary schools fell steadily from 34.3 in 2002 to 32.0 in 2006, with rather smaller average class size on the Island of Rodrigues than on the Island of Mauritius. Average pupil/teacher ratio (PTR) fell from 21.6 in 2002 to 18.7 in 2007<sup>23</sup>. In primary schools, and according to international standards, the PTR and the average class size should be broadly correlated, whereas in Mauritius they indicate a significant difference (see Figure 19 below). Leaving aside the head-teacher, at any one time during the school day, the typical primary-school teacher will be expected to be in his/her classroom, teaching his/her class. On average, this must be true for each teacher teaching on average 32.0 children in the class. The low PTR of 18.7 is explained by the significant numbers of teachers of Asian languages, plus the Deputy Head Teachers (DHT), who average 4 DHTs for each primary school.

<sup>23</sup> The latter calculation is made in accordance with the agreed international definition - that is, including all teachers in schools except head-teachers (and in some countries even the latter are also included). The Digest of Education Statistics includes (in Table 3.1) calculation of PTR but only GP (General Purpose) teachers are included – that is, it excludes all other teachers and also deputy head-teachers. This practice therefore does not accord with accepted international practice and will need to be adjusted in the future so that Mauritius indicators are compatible with international equivalents.

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**Figure 19: Average Pupil/Teacher Ratio in Primary Schools**

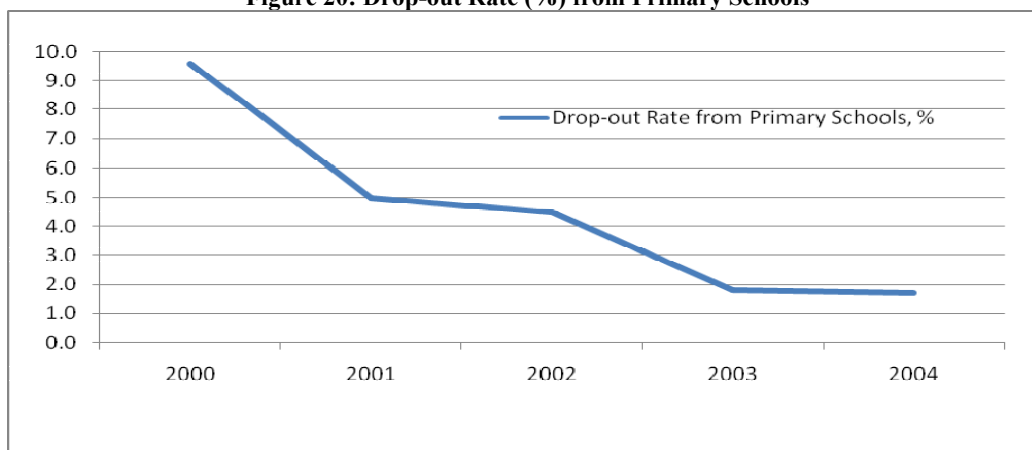


Notwithstanding the above achievements, the key weakness of the system pertains to the output of primary schooling, both in quantitative and qualitative terms. The internal efficiency of the primary cycle is about 80 percent. Grade repetition accounts for inefficiency in the system. There is a repetition rate of about 4 percent at primary school level. Although repetition is insignificant at Grades I-V mainly because of automatic promotion, it however becomes very significant at Grade VI, at about 23 percent, as a large proportion of those pupils who fail the CPE repeat a year, with the aim of improving their performance in examination the following year. Repetition becomes also very significant in the later years during secondary education. The CPE pass rate has stagnated at around 65 percent over the last decade, with the performance of girls far exceeding that of boys (74.3 percent against 62.0 percent in 2006). The transition rate to secondary level has evolved from 50 percent in 1993 to 71 percent in 2007. Drop-out rate from primary schools fell from 9.6% in 2000 to only 1.7% in 2004 and has continued to fall subsequently. It is now regarded as being so low as to be insignificant<sup>24</sup> (see Figure 20 below).

<sup>24</sup> It is noted here however, that there are approximately 500 children (below the age of 16 years) being catered for through programmes implemented by local, regional and international NGOs targeting 'out-of-school' youngsters. However, no official figures exist as to the numbers of children and youngsters under the age of 16 years that are not in school (as required by law).

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**Figure 20: Drop-out Rate (%) from Primary Schools**



The major cause for concern is the deficit in learning outcomes, accumulated right from the early years of primary schooling, for a significant proportion of the children. About 44 percent of Mauritian Grade VI pupils had not acquired the minimum skills in reading that were required for them to cope with learning at the next grade level. Boys had lower reading skills than girls. Children coming from homes with low socio-economic backgrounds performed less well than those coming from better home backgrounds (SACMEQ, 2003).

There is a deep-rooted culture of competition in Mauritius, arising from the dual nature of the CPE examinations which is used for both (i) certification purposes, regulating eligibility for secondary education and (ii) selection purposes for the admission of pupils in high-demand secondary schools. Although the ranking of pupils for admission in secondary schools was abolished in 2002, this did little to ease the pressure on pupils taking the CPE. The secondary schools had acquired high public esteem by proxy, through the students they have been admitting over the past 25 years.

Several factors including lack of an effective quality assurance system, formative assessment and the like cause more than 85 percent of parents to have recourse to private tuition for their children, a practice institutionalised especially in this sub-sector where the class teacher is allowed to provide tuition against payment to his/her class pupils on school premises after school hours from Grade 4 to Grade 6. The structure, learning content and examination system do not adequately recognize that children possess different learning styles and talents and that children develop at different paces. Creative subjects have been sidelined and the child's personal development sacrificed to the goal of acquiring information. The assessment does not identify the quality of pupil learning, but rather the quantity of pupil learning as defined by memorisable units and consequently the teaching style adopted is one that matches the assessment style. Pupils' success thus depends on the extent to which their learning styles match the teaching and assessment styles. This is reflected in the U-shaped distribution of learner performance grades in CPE examinations which indicates that there is a high proportion of pupils at both the high ability end and at the low ability end. This characterizes an important inequality in learning achievement.

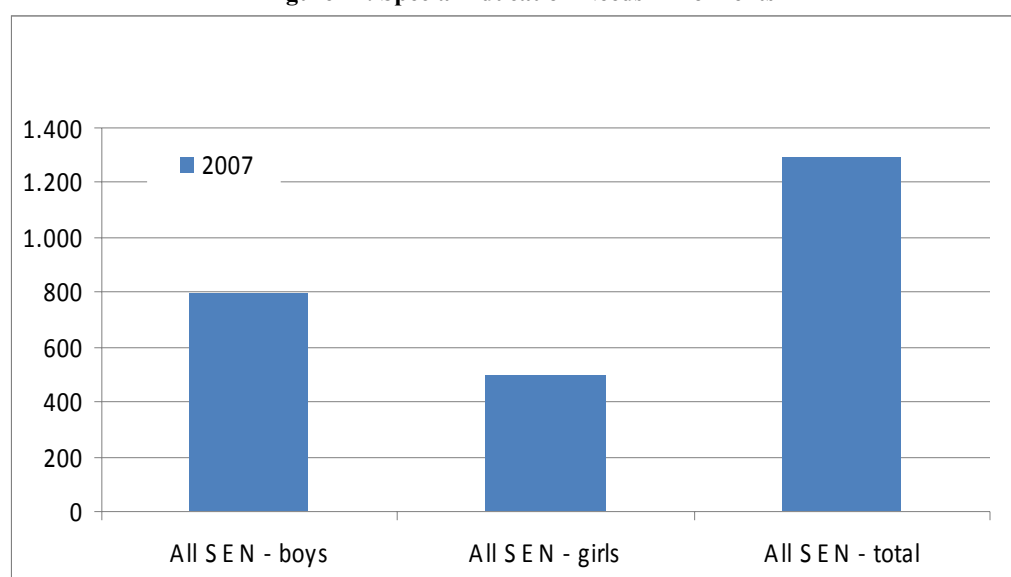
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The Zones d'Education Prioritaires (ZEP) have been created to address educational failure. Its strategy is based on the premise that positive reinforcement is required to create favourable learning conditions for children mostly in the less developed regions. In the broader perspective, this approach aims at combating social inequalities by providing equal opportunities to all primary school children of the country. Although progress has been slow in terms of pupil achievement as measured by the CPE pass rate, ZEP schools have, on the other hand, managed to produce some good practices such as holistic educational approaches, school-community partnership, active parent involvement in the educational process, fund-raising models for school improvement projects etc.

Perhaps, one of the most interesting outcomes of the philosophy upon which the education methodology for ZEP schools is based is the social outcomes it has achieved. In the case of ZEP schools, what needs to be removed is the negative branding/labelling but without losing the added value it has provided to the education system. In other words, the spotlight with regard ZEP schools must be taken away from 'failure' by promoting measures to enhance the 'successes' of ZEP students and schools.

As for special education needs, MOEHR does not publish any data relating to Special Needs children, but the Ministry's own internal data (see Figure 21 below) show a total of 1,292 children (61% boys) enrolled in all SEN schools, SEN Day Care Centres and Government Units, whereas it is estimated that the total number of SEN children in Mauritius is around 3,000. On this basis children currently being catered for in SEN schools/units represent only around 43% of the estimated total population of children with special educational needs and whose needs are not currently being met.

**Figure 21: Special Education Needs Enrolments**



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It is therefore of utmost importance that SEN policy guidelines and strategic framework move forward immediately along specifically defined goals and targets for each year so that by 2020, all SEN children in Mauritius will be enjoying access to relevant, high-quality provision.

The choice of the language of instruction used in school, as previously indicated, is of utmost importance. Teachers are known to use Mauritian Kreol as a support in their teaching strategies. However, facilitation of learning through the use of a language other than the 'official' language of instruction, which is also the 'official' language of assessment, can only occur effectively if the teacher is trained in the methods and applications of bilingual education/instruction – otherwise, there is strong risk to impact students' learning and outcomes negatively.

Where the language of instruction in schools is different from the language commonly spoken at home (the mother tongue) or the immediate environment of the child, better student outcomes (both in terms of learning quality and quantity) will depend firstly, on the timing and gradation of 'total immersion' into the 'official' language instruction at school, and secondly, the training, knowledge and conceptual understanding the teacher has regarding bilingualism and/or second language acquisition/learning.

Teachers must be trained on the impacts of bilingualism and accompanying teaching methodologies in order to take advantage of this great resource of Mauritian children – their bilingualism, rather than allow it to serve as an obstacle to their learning. This aspect of teacher training is currently amiss in Mauritius and needs to be identified and addressed urgently.

In short, time spent learning in well-designed bilingual programmes is learning time well spent. Knowledge and skills acquired in the native language--literacy in particular--are "transferable" to the second language (that is, English). They do not need to be re-learned in English. Bilingual education programmes that emphasize a gradual transition to English and offer native-language instruction in declining amounts over time provide continuity in children's cognitive growth and lay a foundation for academic success in the second language.

All the above suggest that we should not consider the unsatisfactory pass rate in terms of students failing but more importantly as the system failing the students. The biggest challenge of primary education today is to promote quality while ensuring equity and reducing wastages. This wastage in fact has a spiral effect at higher levels of the education sector which ultimately impacts negatively not only on the quantity and quality of human resources needed by the economy, but also on employability to more fulfilling jobs and earning power. Compared to countries at a similar level of economic development or countries we seek to emulate, Mauritius suffers from a deficit of skills and competencies needed to rise to the challenge of a global knowledge economy - one example is our comparatively low enrolment at upper secondary level.

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Our aim is to reinforce confidence in learning and achievement that will lead to the attainment of high and socially equitable distribution of learning outcomes. Building a strong educational foundation will result in pupils who make greater progress in learning, in learning how to learn and in learning to love learning. We aim to see our students master an enriched and challenging curriculum right from the earliest years in school. Through the reorganisation of the traditional two 3 year cycles in the primary sub-sector into three 2-year cycles, we believe that every student can and should learn more in school, acquire a greater depth of understanding and an ability to apply critical and creative thinking to what is learned. This can be achieved by improving the quality of instruction and ensuring that every child benefits from the high-quality instruction. All parts of the learning system – including the performance of both students and teachers – need to be assessed more frequently and more usefully, so that individual teaching and learning, as well as the system as a whole, can be continuously improved. This must be backed by a strong quality assurance mechanism that will monitor the teaching learning process and intervene promptly to ensure good instruction is delivered consistently across the system.

### **3.2.2. Overall Goal**

The Overall Goal of MOEHR for primary education is to sustain equitable access to quality education, ensuring that all learners attain high levels of achievement in Literacy, Numeracy, Information and Communications Technology and essential Life Skills as the basis for lifelong learning.

### **3.2.3. Critical Challenges**

1. address the problem of high failure rate at the end of the primary cycle and make public spending on education become more cost-effective
2. review the purpose of CPE examinations
3. move towards the elimination of the necessity of and reliance on private tuition
4. integrate a remedial education programme in the curriculum
5. support the integration of children with special education needs in the regular school system
6. gradually phase out ZEP schools with integration of ZEP best practices in all primary schools
7. empowering heads of schools, giving them more autonomy and increasing at the same time their accountability to produce results through the setting up of performance indicators

### **3.2.4. Strategic Goals**

1. Improve equity of access to education
2. Provision of quality education to all
3. Achieve gender equality
4. Improve efficiency of school system

### 3.2.5. Summary of Strategic Activities

#### **Curriculum review**

The Ministry shall periodically review curricula of primary education to ascertain the acquisition of sound literacy, numeracy and ICT skills as well as the desirable skills of critical thinking, creativity and innovation required for further learning such that each child can perform to the highest limit of his or her potential. The Ministry shall ensure that the curriculum strengthens the inclusion of social skills for self-improvement in a multicultural society and lifelong skills. Instructional materials shall also be reviewed regularly to ensure they respond positively to changing technologies.

#### **Improvement of quality of teaching**

The Ministry shall review the content of teacher training programme to empower teachers with the required knowledge, values, skills and attitudes for successful implementation of the curriculum. The Ministry shall continue the provision of in-service training for continuous professional development and re-skilling teachers on innovative pedagogical approaches, emerging challenges in curricula, new technologies and management practices.

#### **Addressing the language of instruction**

The language of instruction in schools is different from the language commonly spoken at home or in the immediate environment of the child. Mauritius faces a situation where the 'official' languages used at school (English and French) are substantially different from the language(s) of the environment from which the learners come. It is recognised that better learning outcomes in the 'official' language become a reality only after gradual exposure to it. In other words, there cannot be a 'total immersion' in the 'official' language at the very early stages: keeping the timing in view is paramount.

But this also necessitates a conceptual understanding on the part of the teacher regarding multilingualism and/or second language acquisition/learning. Teachers shall accordingly be trained on the impacts of multilingualism and accompanying teaching methodologies in order to take advantage of this great resource of Mauritian children, rather than allow it to serve as an obstacle to their learning.

#### **Implement policy guidelines on inclusive education**

MOEHR shall implement policy guidelines on inclusive education focusing on integration/inclusion of learners with special educational needs/disabilities into the regular school system at all levels in order to enable them to contribute to their own welfare and that of the country.

#### **Develop education sector gender policy**

MOEHR shall develop a sector gender policy consistent with the principles and operational strategies of the National Gender Policy Framework. The policy shall ensure equal opportunities are given to both sexes to achieve gender equality in learning achievement. It shall also ensure the gender-sensitivity of curricula and teaching and learning materials. Gender-sensitive indicators shall be developed to monitor gender gaps in education.

### **Conduct of a National Diagnostic Assessment**

A child would have a very firm educational foundation if, by the end of Grade III, he/she has achieved the reading, writing, listening and speaking outcomes specified at this level. Unless this foundation is laid down, pupils face a long, hard struggle in the later years to gain what they should already have acquired. The Ministry shall reinforce the system of baseline profiling, recording of achievement through the progress sheet, and early diagnostic assessment based on specific learner outcomes and standards in literacy and numeracy to be administered at the end of Grade 3 for diagnosis. This will be followed by remedial education. Private tuition will accordingly be allowed only in the third primary school cycle (i.e. Grade 5 and 6) for a period of time. For that period a proper regulatory framework governing the conditions for such practice will be put in place. Alongside, the different measures to be introduced, including diagnostic assessment accompanied by sound remediation and regular continuous assessment, will all help towards a gradual elimination of the reliance upon private tuition.

### **Development and enforcement of policy on continuous assessment**

To improve the quality of teaching and learning, MOEHR shall gradually integrate continuous assessment in the system initially for formative purposes. This shall ensure that weaknesses are identified early and remediation undertaken so that individual teaching and learning, as well as the system as a whole, can be continuously improved.

The review of the purpose of the CPE examination as an instrument of selection will be done in a phased manner. There will be a gradual introduction of continuous assessment as from Grade 4 as a natural sequel to the diagnostic assessment and remediation already started at Grade 3. A panoply of measures leading towards full transparency in the process, including training, benchmarking and validation, will be undertaken such that, in time, with conducive conditions being attained, continuous assessment will be anchored and embedded in the system and a reasonable weighting/weightage given to it in the final end-of-primary cycle assessment.

The CPE examination in its present form will consequently remain in place until such time that, in the light of the various measures proposed and the determination of their impact, consideration be given to its overall review.

So as to further encourage and incentivise learners to attend neighbourhood schools, other incentives would subsequently be introduced to enable all children to move on smoothly to secondary level of education.

### **Improvement of school supervision**

There is not much point in conducting assessment if it does not mobilize for action. A great challenge lies in making a connection between assessment and development at the school level. The Ministry shall set up a Quality Assurance Division to undertake regular and purposeful supervision of schools and to monitor teaching and learning. Evaluations made will provide the requisite information essential for informed interventions in curriculum development/review, school management reforms and teacher development.

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### **Enhance leadership and management capacity at school level**

Good schools and good head teachers go together. The capacity of School Heads to improve pupil achievement is strongly correlated with the quality of the leadership provided by the School Head. The Ministry shall build capacity among Heads of Schools on the best practices in School Leadership and Management to provide the leadership necessary to effectively manage their schools and improve learner achievement.

### **Enhance learning environment**

MOEHR is determined to offer services of highest educational standards that will enhance the quality of life and education of all our children. The Ministry will continue to provide teaching and learning materials to schools. Nearly half of existing primary schools are in a desperate need of maintenance, rehabilitation and in some cases, reconstruction. This directly impacts on the quality of educational provision we want for our children. An infrastructural plan shall be developed for the construction of new schools, expansion of classrooms in existing schools and renovation of schools. In addition special attention shall be given to ensure that infrastructure is adapted to meet the needs of children with special needs.

### **Embedding science culture and support technologies in the system**

Efforts will centre on the provision of a rich variety of learning experiences of pupils such that they are better prepared to make the transition to secondary schooling. Emphasis will thus be placed amongst others, on science, technology and social skills. The Ministry shall continue to allocate resources for schools to be technologically equipped for the implementation of ICT programmes. ICT in schools will be used to develop basic computer literacy skills, to support learning and as a tool for school management.

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### 3.2.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
1. Improve equity of access to education	1.1 Provide equality of opportunities for learners with special education needs and otherwise disadvantaged learners	All SEN children to enjoy access to relevant and high quality education by 2020	1. Reinforce the policy for the integration of children with special education needs.  2. Identification of disabilities and learning difficulties.  3. Train a larger number of teachers in the fields of special education and remedial education.  4. Develop an adapted curriculum for children with disabilities.
		Institutional and regulatory framework developed by 2010	Develop institutional and regulatory framework to facilitate provision of services from early years of development and beyond
		Action Plan to set up a SEN Development & Resource Centre by 2010	Develop an Action Plan to set up the Special Education Needs Development and Resource Centre in line with the SEN policy guidelines.
2. Provision of quality education to all	2.1 Undertake continuous review of curricula undertake continuous review of curricula to respond to new social concerns and develop modes of assessment	Curricula revised in 2007 and updated regularly	Continue revision of school curricula to reinforce and further develop core competencies, skills, standards and targets in literacy and numeracy, complemented with civic responsibility and citizenship as well as essential life skills.
	2.2 Ensure full-scale implementation of the curriculum that caters for different learning capabilities	Learning achievement for primary education improved to 90 percent by 2020	Train teachers to adapt learning programmes to meet individual learning needs.  Gradual phasing out of ZEP schools with integration of ZEP innovative practices in primary schools.

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.3 Improve all aspects of quality education through measurable learning outcomes	<p>New modes of assessment developed by 2010.</p> <p>Early diagnostic assessment in place by 2010.</p>	<p>1. Develop a system of early diagnostic assessment based on specific learner outcomes and standards in literacy and numeracy to be administered at the end of Grade 3 for diagnosis and remediation.</p> <p>2. Review current policy of private tuition for its elimination at Grade 4 and initially allowing it only in the third cycle of the primary sub-sector (i.e. Grade 5 and 6).</p>
		Continuous assessment integrated in the system by 2015	<p>1. Integrate continuous assessment in the system so that individual teaching and learning as well as the system as a whole can be continuously improved.</p> <p>2. Develop a model for continuous assessment.</p> <p>3. Review of purpose of CPE examinations from an instrument of selection to a record of achievement and competencies acquired.</p> <p>4. Improve measurement and testing learning outcomes.</p>
	2.4 Ensure that all children at lower primary attain minimum level of competency	Remedial education fully integrated in the system by 2015	<p>1. Develop remediation plan.</p> <p>2. Special training for remedial teachers.</p>
	2.5 Embed science culture and support technologies in the system	All schools technologically equipped by 2015	<p>1. Use of ICT as a tool for teaching/learning in the classroom.</p> <p>2. Review and develop instructional materials that are responsive to changing technological needs.</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.6 Improve the quality of learning environments so that our institutions serve the best interests of all sections of society.	Ten-year infrastructure development plan developed by 2009	1. Prepare an infrastructure development plan. 2. Ensure compliance with norms and standards.
	2.7 Provide in-service training for continuous professional development and re-skilling of teachers	Review teacher education curriculum completed by 2010 and fully operational by 2015	1. Review content of training programme by 2010.  2. Include in all pre-service training of school teachers the methodology of bilingualism.  3. Review the profile of teachers so that in 2015 all primary school teachers are at graduate level  4. Train teachers in methods and applications of bilingual education/instruction
<b>3. Achieve gender equality</b>	3.1 Achieve gender equality in learner achievement	Reduce gender gap in performance by 2015	1. Revise curricula, learning materials and modes of assessment to make them gender sensitive. 2. Train teachers in gender-differentiated pedagogy.
<b>4 Improve efficiency of school system</b>	4.1 Enhance management capacity at school		Build capacity among Heads of Schools on the best practices in School Leadership and Management. Review the role of Head teachers.
	4.2 Create a strong Quality Assurance system to secure internal efficiency and quality teaching and learning	Quality assurance systems and processes in place by 2009 and fully operational by 2015	1. Setting up of Quality Assurance Division.  2. Develop norms and standards for supervision.

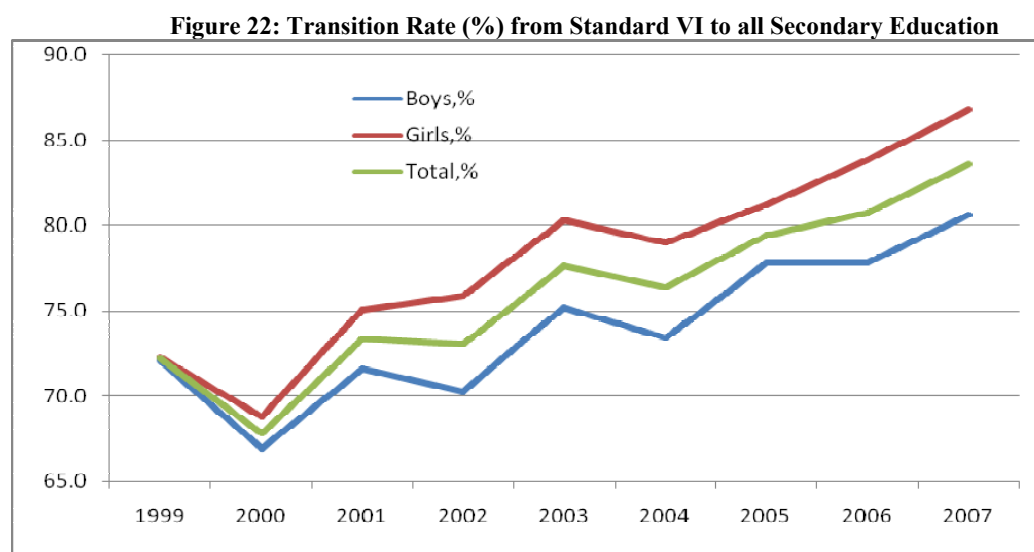
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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	4.3. Encourage community participation	Community participation guidelines and frame work to be complete by 2009	<p>1. Reinforcing the participation of parents in the education of their children and in school-based management.</p> <p>2. Encouraging the private (business) sector to fulfil its corporate social responsibility in the education sector.</p> <p>3. Fostering increased private educational initiatives and innovations.</p>

### 3.3. THE SECONDARY EDUCATION SUBSECTOR--ESTABLISHING STRONG TRANSITIONS THROUGH ADOLESCENCE TO ADULTHOOD

#### 3.3.1. Situational Analysis

While near universal primary education was attained in the 1960's, substantial expansion in secondary enrolment occurred after 1977, with the provision of free secondary education as part of Government's policy to democratise access to education. Access to secondary schooling depends on success at the Certificate of Primary Education at the end of the primary cycle. The transition rate from Standard VI (including repeaters) to all secondary education, mainstream and pre-vocational, as illustrated in Figure 22, has been rising very significantly, from only 73.3% in 2001<sup>25</sup> to 83.6% in 2007<sup>26</sup>. The private sector predominates in the provision of secondary education, with a 60 percent share of enrolment. It is a reflection of a longstanding partnership between the private and public sectors in the provision of secondary education which has contributed to making the Mauritian education system a major success.



The GER for both secondary mainstream and secondary pre-vocational combined (expressed as a percentage of the 12-19 age group) has been rising significantly from a total of 61% in 2001 to 75% in 2006.

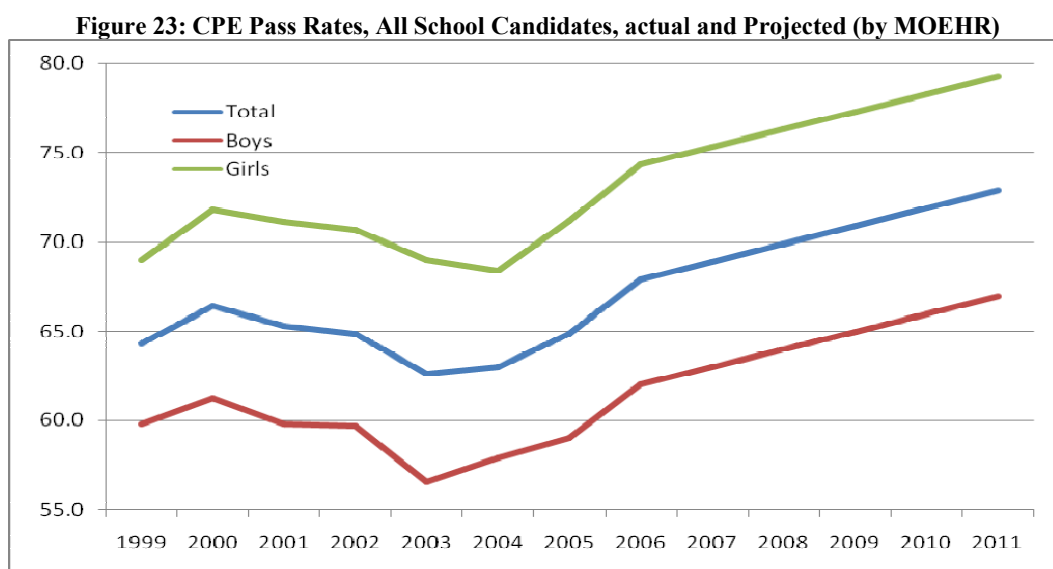
<sup>25</sup> Boys 71.6%; girls 75.1%.

<sup>26</sup> Boys 80.6%; girls 86.8%.

## 3.3.1.1. Secondary Mainstream

Enrolments in (mainstream) secondary schools have continued to increase for many years, reaching a total of 116,706 enrolled in 2007, of which 60,609 (51.9%) are girls. The percentage of girls has not fluctuated significantly in recent years. The percentage of enrolment in government schools (38.1%) has risen significantly from only 25.4% in 1999. This percentage is predicted to continue to increase slightly for perhaps the next two or three years, as all state secondary schools become fully operational.

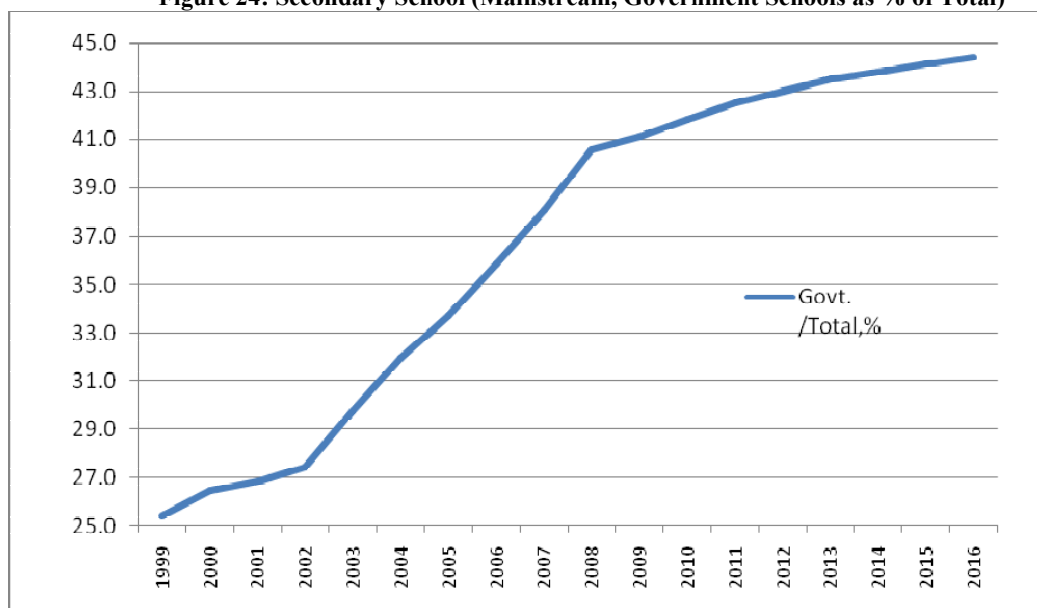
Total enrolment in secondary mainstream classes depend not only on the population data for the relevant age cohorts, but also on success in the CPE examination - the pass rate for which has been rising slowly but steadily (see Figure 23 below). Any decline in secondary mainstream population will concentrate in undersubscribed private schools<sup>27</sup> whilst the proportion of children in government schools will continue to increase, at least until 2016 (see Figure 24).



<sup>27</sup> As parents seem to opt for places in government schools where these are available.

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**Figure 24: Secondary School (Mainstream, Government Schools as % of Total)**



In mainstream secondary school classes, average class size was approximately constant at 34 until 2003, after which it declined to 33 and has then gradually fallen back to 32.7 in 2006. Average pupil-teacher ratio fell steadily from 16.0 in 2002 to 14 in 2006. About 40 percent of the education budget is spent in public financing of secondary education.

The main weakness of the secondary subsector is characterised by a high rate of repetition which occurs mostly at Form IV and Form V levels. In 2006 the repetition rate at Form IV and Form V stood at 18 percent and 28 percent respectively. An equally large percentage (24 percent) leaves school at the end of Form V.

Of a hypothetical cohort of 100 pupils entering Standard I, only 32 survived to the last grade of secondary, i.e. to Form VI. Overall the school life expectancy is 10.2 years which falls short of the 11 year compulsory education<sup>28</sup>. This causes the gap between secondary to tertiary enrolment to be large as evidenced by a low Gross Tertiary Education Enrolment Rate (GTER) of 37.3 percent.

<sup>28</sup> Education is an important driver of economic growth. Estimates show that adding one extra year to the average years of schooling increases GDP per capita. The reason for this is: (1) education builds human capital and enables workers to be more productive; and (2) education increases a country's capacity to innovate - an indispensable pre-requisite for growth and competitiveness in today's global knowledge economy.

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Secondary schools in Mauritius have continued to remain an appendage of the British system, preparing students for the Cambridge School Certificate and Higher School Certificate – a credential which Mauritians value for its portability and hence access to universities abroad. The spirit of competition prevails throughout the education system. The Laureateship Scheme rewards the best candidates of the Cambridge HSC examinations. It covers tuition fees, travel costs as well as living expenses.

Inside the school system is a rigid and inflexible structure that very often does not leave much choice to students in terms of subject orientation. If young people are to continue learning after the age of 16, they must be provided with learning experiences and opportunities that meet their aspirations and match their abilities. Just as significantly, students should be in a position to think critically, develop their competences, become problem-solvers and establish the linkages among the different areas of knowledge. Only then will they and the country be in a state of preparedness to adapt to an increasingly changing global environment. This pre-supposes that there must be a broad-based, flexible and responsive curriculum that both motivates students to stay in learning and at the same time challenges the most able. It demands a thorough revisiting of the Forms I to III curriculum, in terms of the provision of a broad base education that serves as a continuity to the primary education.

The time has also come to envisage the broadening of opportunities at the end of secondary schooling through the inclusion of such alternative modes of assessment as those provided by examining boards such as the International General Certificate of Secondary Education (IGCSE), General Certificate of Education (GCE), International Baccalaureate (IB) to respond to the diverse needs of students and the emerging ones of the country, rather than resorting to a single examination system driven by the CIE.

This also demands a review of the traditional assessment system that places almost entire emphasis on the end of cycle examinations. Besides review of the examination system, there is a dire need to bring back a culture of hard work and improved achievement in secondary schools. Among other things, consideration may as well be given to a formal assessment at Form IV level that will bring the system more in line with the concept of 11-year schooling in that it will help identify (for learners) the areas of further learning more attuned to their aptitudes and inclinations.

Other deficiencies are manifest in the sector: most teachers entering the profession have a first degree ( and, in the case of many private providers, a diploma) as an entry qualification without the relevant professional qualification like a PGCE or a B.Ed. In-service professional development is scantily provided and there is always a backlog to catch up on. This inevitably has a severe repercussion on the quality of teaching and learning. In fact, there is a criticism often levelled to the effect that teachers are ill-equipped to teach mixed ability classes. However, the reality is more complex. There is also an unwillingness or incapacity of trained teachers to translate into practice what has been acquired through training -whether through parental pressure where parents fail to understand the necessity of

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collaborative learning to be better prepared to face the competition, or the result-minded ethos that tends to encourage too heavy reliance on private tuition, or again the lack of motivation and absence of conditions conducive to the inclusion of innovative pedagogical practices in our schools.

Besides, there is not much evidence of remedial education for those whose pace of learning is different, resulting in a systematic incremental failure to catch up within the classroom. Quite understandably, then, private tutoring, as an alternative to formal schooling, is rampant with the consequent adverse effects of school absenteeism, indiscipline problems, sometimes even disaffection with school.

Lately, however, some changes are gradually manifesting themselves in this sector. The existing curriculum that has been taxed for not being alive to the new emerging socio-economic needs of the country is being revisited. The curriculum review underway is directly synchronous with the new curriculum framework developed for the primary sector and posits an approach that will eliminate the perceived mismatch between the education on offer in schools and the wider expectations for the development of those skills and competencies that adaptation to a fast- changing global economic environment necessitates.

Basic to this new insight is the dual premium placed on science and technology and the establishment of pathways between the academic and vocational streams of secondary education. The introduction of compulsory science for all, as well as a social science for the science stream and a “vocationalisation” of secondary education are accepted today to be nodal elements for the broadening of the curriculum base and the removal of the stigma that has for too long been attached to vocational and technical education as being meant for the cognitively less able learners.

### **3.3.1.2. Prevocational Education (PVE)**

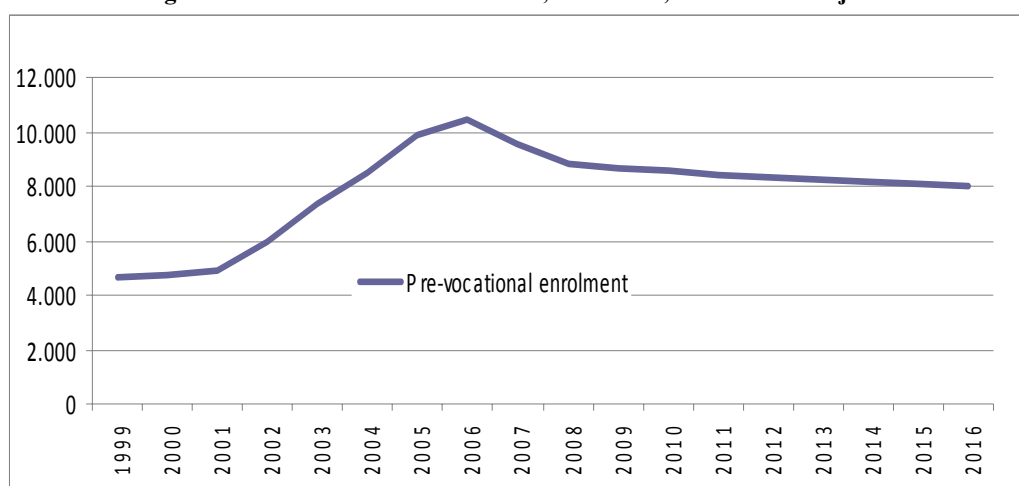
Prevocational education is provided in secondary schools to those who fail the CPE examinations. As a collaborative venture with private providers, its aim is to provide three years additional schooling to make up for the academic deficit built up during the years of primary schooling and to enable skills development for further vocational training. However, about 20 percent still drop out at the end of the second year of Pre-vocational education.

Enrolments in pre-vocational secondary classes increased from 4,695 students in 2000 to 9,573 in 2007 (representing 7.6% of all secondary-level enrolments). This however, was a decline from the peak of 10,424 in 2006. Boys pre-dominate in secondary pre-vocational classes, representing 62% of all enrolments.

As per current trends, enrolment in Pre-Vocational classes is predicted to continue to decrease until at least 2016 (see Figure 25 below). Attempting to predict total enrolment in pre-vocational classes is complex, since it relates to a mix of the population data for the relevant age cohorts and success (or rather failure) in the CPE examination.

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Figure 25: Pre-Vocational Enrolment, 1999-2016, Actual and Projected



In pre-vocational classes, average class size has always been lower than in mainstream classes. It fell steadily from 24.9 in 2002 to 21.2 in 2006. Average pupil-teacher ratio fell from 16.9 in 2003 to 15.3 in 2006. The pupil-teacher ratio is higher on the Island of Rodrigues than on the mainland<sup>29</sup>.

Unfortunately, PVE has a negative branding, being associated with CPE failure. Although PVE was conceived in the late 1990s with the best of intentions to provide an 'alternative' option for students who had failed the CPE twice, and exceeded the age limit to attend primary school but who were required by law, as from 2005 to continue schooling until the age of 16 years. It can be said that this added to the perception of technical and vocational education being only fit for the academically less able. This needs to be addressed immediately, and the more so as the international trend is to shift initial technical/vocational education to the upper secondary level to respond to the need to develop knowledge workers. A suitable blending of academic and technical education will also create the relevant pathways to higher education. Moreover, the Programme for International Student Assessment (PISA)<sup>30</sup> has generated clear evidence that very early separation into academic and vocational tracks - in early adolescence - is undesirable and sometimes leads to an irreversible tiering of opportunities later in life.

<sup>29</sup>This is due primarily, to the fact that: (a) in Rodrigues, the local budget is decided separately, by the local government; and (b) there is no teaching of Asian languages.

<sup>30</sup> PISA seeks to measure how well young adults, at age 15 - and therefore approaching the end of compulsory schooling - are prepared to meet the challenges of today's knowledge societies.

### 3.3.2. Overall Goal

To ensure that all students are given the opportunity to successfully complete higher secondary education and embark on higher and further education and training for employability with the required maturity and confidence.

### 3.3.3. Critical Challenges

1. Address the issue of quality in the educational provision and delivery.
2. Provision of opportunity for continuous professional development of all school personnel
3. Improvement of modes of assessment, remediation and control
4. Ensure greater accountability and transparency in publicly funded institutions
5. Revisiting prevocational education to be an integral part of secondary schooling
6. Address the problem of absenteeism and private tuition at all levels
7. Empowering heads of schools through the provision of more autonomy and increasing accountability in the system of secondary schooling

### 3.3.4. Strategic Goals

1. Improve completion rate at upper secondary level and minimise wastage at secondary education level
2. Improve all aspects of quality education through measurable learning outcomes
3. Undertake regular review of curricula to respond to emerging needs of the economy and society.
4. Ensure that students obtain optimal opportunity for academic and self-development
5. Introduce support technology in the system
6. Continuous in-service training of school personnel at all levels
7. Increase access to secondary education to children with special education needs
8. Improve effectiveness of secondary school management system
9. Ensure equity among publicly-funded schools
10. Create a strong Quality Assurance system to secure internal efficiency and quality teaching and learning
11. Develop a decentralized management and delivery system that supports greater community participation

### 3.3.5. Summary of Strategic Activities

#### **Completion rate**

Secondary schooling can be viewed both as a terminal point in the current education system by virtue of compulsory schooling up to age 16 as well as a stepping stone for further education. It is vital therefore that the issue of both the internal and external efficiency at that level be addressed such that secondary schools produce more and better graduates. To that end the Ministry is committed to ensure improvement and successful completion rates in secondary schools.

#### **Quality**

The emphasis will be on improvement of quality through a diversification of learning opportunities, a review of existing modes of delivery and assessment and inclusion of a diversity of learners so that every child feels the need to invest more effort in completion of secondary school.

#### **Curriculum development**

Greater attention will be placed on curriculum development and review as a regular activity of the Ministry so as to respond to emerging and future needs of the economy and society. "Vocationalisation" of secondary schooling will be phased in while all attempts will be made to embed a culture of scientific thinking in line with the drive towards sustainable development.

The inclusion of ICT, learning of science and a broadening of the curriculum at the Lower Forms as well as the inclusion of an examination at the Form IV level for, *inter-alia*, engaging all students in learning in a more responsible manner will be the driving forces of the subsector.

#### **Continuous professional development**

The Plan provides more opportunity for training, continuous professional development for school personnel, while making proposals for empowering school management and leaders in both administrative and academic leadership.

#### **Equity**

Acknowledging the role of private schools and with a view to ensuring equity, there will be periodic review of the funding for all publicly funded secondary schools. The equity issue will also encompass the increased opportunities for the integration of those learners needing special consideration in keeping with their disabilities and learning difficulties.

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### 3.3.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
1.Improve completion rate at upper secondary level and minimise wastage at secondary education level	School to devise plan to attain objective of minimizing wastage	Completion rate increased from 38 percent to 80 percent by 2015	<p>Improve quality of schooling through:</p> <p>(i) teacher training, school leadership and management</p> <p>(ii) learning resource centres in schools</p> <p>(iii) improved teaching and learning processes through the development of a community of practice at school and regional level</p>
2. Improve all aspects of quality education through measurable learning outcomes	2.1 Improve assessment modes and procedures	Alternative mode(s) of assessment to Cambridge SC and HSC developed and fully operational by 2015	<p>1.Establish links with international examinations authorities</p> <p>2.Make provision for introduction of alternative system of assessment by 2009</p>
		Continuous assessment culminating with end of year assessment fully integrated in the system by 2015	<p>1. Develop assessment policy to cater for learners with diverse abilities.</p> <p>2.Integrate continuous assessment in the system</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>3. Develop appropriate models for continuous assessment</p> <p>4. Develop resource materials that help teachers assess pupil work accurately and consistently on the specific learner outcomes</p> <p>5. Train teachers to assess pupil learning in a way that will help them improve their performance</p>
	2.2 Remedial education fully integrated in the system by 2015	Develop modalities for remedial education in secondary schools	Integrate remedial education in the system for children with learning difficulties
<b>3. Undertake regular review of curricula to respond to emerging needs of the economy and society</b>	Curriculum review instituted as a continuous process	Curricula revised in 2008 and updated regularly	<p>1. Continue revision of school curricula to provide a broad - based curriculum to integrate vocational subjects</p> <p>2. Ensure an improved use of English language at secondary level</p> <p>3. Promote the teaching of science, environment education, sustainable development</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			4.Develop linkages with stakeholders
<b>4.Ensure that students obtain optimal opportunity for academic and self-development</b>	Strategies for provision of optimal opportunity for teaching and learning in place in schools	<p>All schools provide ample opportunity for learning through a restructure of delivery within schools</p> <p>Examination at Form IV level operational by 2010</p> <p>Processes to reduce absenteeism defined and a monitoring mechanism put in place as from 2009.</p> <p>All schools engage students in extra and co-curricular activities</p>	<p>Review school timetable to include ample opportunity for teaching and learning to be viewed as effective for all students.</p> <p>Form IV examination defined and introduced.</p> <p>Modus-Operandi to reduce absenteeism worked out</p> <p>Promote active participation of students in co/extra-curricular activities as compulsory requirement for the Leaving Certificate</p>
<b>5. Introduce support technology in the system</b>	ICT introduced in all schools for use by all teachers	<p>ICT Plan developed for secondary schools by 2010</p> <p>ICT used across the system by 2015</p>	<p>1.To provide ICT facilities to ensure that all teachers use ICT facilities on a regular basis for teaching and learning</p> <p>2.Make provision for wider use of online materials and Knowledge Channel</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			3. All students leaving secondary are equipped with ICT skills to adapt to the requirements of future needs of independent learning.
<b>6.Continuous in-service training of school personnel at all levels</b>	Continuous In-service training becomes a requirement for all school personnel	Schools gradually include continuous professional development as from 2009 and fully integrated as from 2010	1.Put in place diverse models of continuous professional development  2. Teachers trained to be polyvalent with the ability to teach more than one subject).
<b>7.Increase access to secondary education to children with special education needs</b>	Provision for increase access to students with learning difficulties and special education needs	PVE to become an integral part of mainstream by 2015.  Increased integration of students with special education needs	1. Pursue further the policy for the integration of students with special education needs and learning difficulties  2. Provide schools with the required infrastructure  3. Train a larger number of teachers in the sub sector  4. Adapt curriculum to suit students with special needs

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
8.Improve effectiveness of secondary school management system	8.1Enhance management capacity at school	All school leaders provided with training and support for better administration of schools as well as better supervision of teaching and learning.	<ol style="list-style-type: none"> <li>1. Review the role of Head of Schools</li> <li>2. Build capacity of Heads of Schools in School Leadership and Management and pedagogical supervision at school level</li> <li>3. Recognise and disseminate best practices</li> </ol>
	8.2 Develop a decentralized management and delivery system that support greater community participation	Decentralisation policy developed by 2009 and phased in implementation to begin by 2010	<ol style="list-style-type: none"> <li>1. Setting up of a system of governorship for schools</li> <li>2.Ensure that schools enjoy the required degree of autonomy for school management and pedagogical issues</li> <li>3.Encourage schools to move towards financial autonomy and revenue-raising</li> <li>4.To encourage sharing of resources between schools</li> <li>5.Setting up of a school-based performance management system</li> </ol>

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<b>STRATEGIC GOALS</b>	<b>STRATEGIC OBJECTIVES</b>	<b>2008-2020 TARGETS/ INDICATORS</b>	<b>ACTIVITIES</b>
<b>9. Ensure equity among publicly-funded schools</b>	Funding provided to ensure equity	Operations and management framework of publicly-funded schools reviewed	Monitor unit cost of secondary education and make periodic adjustment
<b>10. Create a strong Quality Assurance system to secure internal efficiency and quality teaching and learning</b>	Quality assurance mechanisms developed and operational	Quality assurance systems and processes in place by 2009 and fully operational by 2015	1.Setting up of Quality Assurance Division  2.Develop relevant norms and standards
<b>11. Develop a decentralized management and delivery system that supports greater community participation</b>	Effective decentralization in decision-taking through the involvement of the community is in place.	Decentralization policy developed by 2009 and phased in implementation to begin by 2010	1.Setting up of a system of governorship for schools  2. Ensure that schools enjoy the required degree of autonomy for school management and pedagogical issues  3. Encourage schools to move towards financial autonomy and revenue-raising  4. To encourage sharing of resources between schools  5. Setting up of a school-based performance management system

### **3.4. SCHOOL STAFF DEVELOPMENT SUBSECTOR--FACILITATING PROFESSIONAL DEVELOPMENT FOR ENHANCING EFFICIENCY**

#### **3.4.1. Situational Analysis**

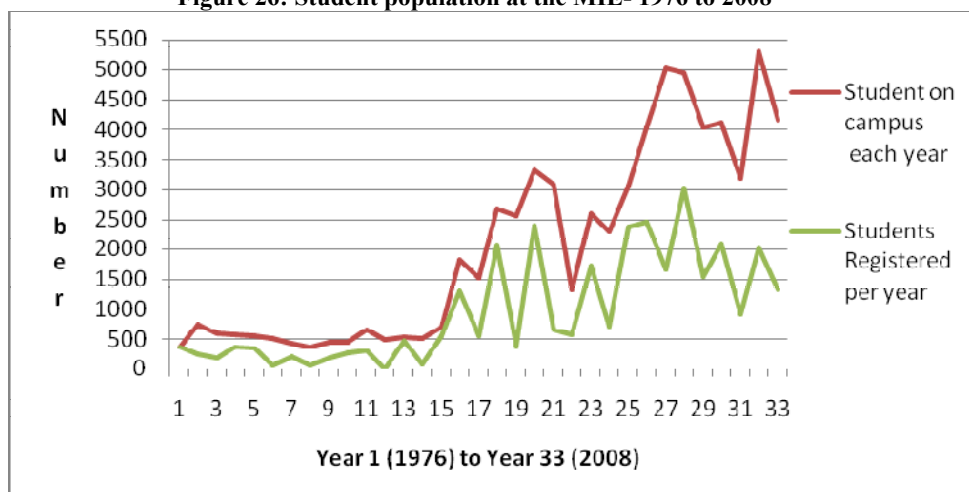
School staff development had for a long time placed emphasis primarily on teacher education which was the central concern of the government in the early 1970s. Prior to this period, the only institution dedicated to teacher training was the Mauritius College of Education which provided pre-service teacher training for the primary school sector. With the felt need for professional teacher training, the Mauritius Institute of Education (MIE), set up in 1973, was mandated '*to provide facilities and to engage in educational research, curriculum development and teacher education ....*' (MIE Act,1973:2).

In keeping with the requirements of the time, in the primary sector, priority was at the outset given to pre-service as well as in-service training for teachers, and, later, for deputy heads, head teachers and the inspectorate cadre, with pre-service Certificate, in-service Advanced Certificate and Diploma programmes. It was only later in 1992 that Advanced Certificate was introduced for in-service primary school teachers on a mixed mode. Lately, with the shift to pre-service Diploma for all new entrants to the primary sector (as from 2003), a diploma on a mixed mode, face to face and distance , is being offered to all in-service teachers (holders of the Advanced Certificate in Education) in association with the IGNOU (Indira Gandhi National Open University) from India.

Free secondary education was introduced as from January 1977 and the gradual expansion in the provision of secondary education by the State alongside private providers required further improvement in the training aspect, particularly in view of the wide disparity in qualifications, especially among teachers employed in private secondary schools. Certificate courses were thus offered for SC holders, Diploma Courses for HSC holders and Post Graduate Certificate in Education (PGCE) for University Graduates. This allowed the education sector to get its first batch of trained secondary teachers by the mid 1970s. Gradually the quality of teaching force improved in private secondary schools; graduates of the MIE found employment in State Schools as well as in secondary schools in countries like Seychelles and Zimbabwe, Botswana and Papua New Guinea.

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Figure 26: Student population at the MIE- 1976 to 2008



Continual reforms in education over the years, however, have created new challenges, not only for the MIE, but also for the other partners in teacher education, namely, the Mahatma Gandhi Institute for Asian Languages and the Mauritius College of the Air which provides a wide range of inputs for audio visual support for all stakeholders in education.

A case in point is the Early Childhood Care and Education subsector which provides an interesting illustration of the willingness of the training process to adjust to shifting realities.

Formerly, since the pre-primary education was not free as was the case for primary and secondary education, the qualification of teachers was not centrally regulated until the creation of the Pre- School Trust Fund in 1993. A very wide disparity in the initial qualification of the teachers already in service in private schools existed, with many of them not possessing any secondary school qualification. This necessitated levelling of the qualification of all pre-primary school personnel through a proficiency certificate programme; it subsequently allowed entry to a Certificate in Pre-primary Education programme. Today, many pre-primary teachers have already completed the certificate programme- though the programme is still on offer. A further boost to upgrade the quality of pre-primary schools is expected through training of pre-primary School Supervisors which is underway.

Nowadays, the gradual shift in perspective has become more perceptible: while the traditional pre-service and in-service teacher education as well as curriculum development responsibility of the MIE still holds sway, there is the confirmation of the further imperative to embark not only on high level professional programmes like B.Ed and Masters in Education including the mandatory pre-entry programme for secondary graduates—the Educator's License<sup>31</sup>—, but also on the development of new training packages

<sup>31</sup> At this particular juncture, entry in the teaching profession at secondary schools does not necessitate any similar professional qualification.

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for the managerial cadre, including Heads of schools and the Inspectorate as well as the fostering of a culture of research in education.

Of vital importance is the dire need for the MIE training programmes to be firmly grounded in the classroom reality. Theoretical knowledge imparted in such programmes, significant and crucial as it is, nevertheless does not compensate for a concrete awareness of the grassroots reality and the need to transform the training into an ability to face new challenges arising on a daily basis as the curriculum is unfolded.

Training and empowerment of all school personnel remains a priority of the Ministry whose mission targets the provision of a Quality education. As such, teacher training facilities will be upgraded to cater for the entire teaching force as well as higher management, ancillary and supervisory staff. Teacher training must therefore offer a wide range of responsive, flexible, high quality and challenging teacher education programmes in line with international norms and standards. Access will also be enhanced through increased use of the Distance Mode. This will necessitate further development in and strengthening of Distance Education<sup>32</sup>.

Emphasis will be placed on transferability, sustainability of training and recognition of good practices so that training has a multiplier effect. The need to develop real community of practice within school is also emphasized. Furthermore, as education is in a continuous state of flux, there is a need to develop a lifelong learning culture through a policy of continuous development for all professionals in education.

Though a lot of emphasis has been placed on the provision of training, it is equally necessary that this strategy is complemented by developing and nurturing a real community of practice at the school and local level. Unless Educators are initiated and helped to develop such practices, training and investment in the professional development of teachers may not have its desired impact.

On the other hand, no system can function effectively without accountability of all stakeholders in the education system. Such accountability will be increased and sustained. A legal framework that supports teachers and school management and creates a commitment to learning in the student population will be envisaged.

As part of its general policy for an inclusive society, a greater thrust will be given to training for the personnel having to respond to the special education needs of both those children with learning difficulties and those that are gifted and talented such that there is an optimisation of all human resources and no child is left behind.

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<sup>32</sup> “To this end, the Ministry of Education will formulate a strategy to implement the development of distance education in Mauritius” (Budget Speech 2008/2009, Pg 14).

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Today, we have come to such a stage in our educational development that teaching must not be viewed as a profession for those who do not find anything better to do or to fall back upon. Thus, a review of entry qualifications and modes of selection for all cadres in education is paramount so as to ensure the employability of those persons who demonstrate appropriate quality, aptitude and commitment to teaching. Based on all the above, there will be the development of a comprehensive HR strategy for training as well as optimal use of all resources at all levels in the sector.

Research is the foundation of any good start as well as the lifeblood of a system developed on the basis of empirical evidence. Thus, there will be further investment in strategic research in education and related fields to encourage innovation and inform policy decisions. Emphasis will also be placed on encouraging school-based action research, the findings of which can be more easily infused in the classroom and curriculum development.

The Mauritius Institute of Education, the main body in charge of teacher training and increasingly taking over the function of curriculum development and research, shall be further empowered to assume such responsibilities. A strong system of quality assurance will be put in place and its status changed to that of a University.

The transformation is also further and clearly reflected by new pressing urgencies for capacity building in such areas as Pre-Vocational Education and, Special Needs Education. Indeed, the publication of the PRB Report 2008 makes a number of recommendations which have four pronged implications for capacity building through training programmes. These relate to:

- (i) *Upgrading of skills and competencies of teachers* through insistence on an all diploma teaching workforce for the primary sector and the necessity for all new entries to the secondary sector to possess an Educator's License as well as the compulsion for all Secondary School teachers in service to possess a PGCE for eligibility to promotional positions;
- (ii) *Targeting Special Education Needs* through the creation of the posts of "Trainee Educator, Special Education Needs" and "Special Education Needs Teachers" working closely with the class teacher;
- (iii) *Leadership and educational management* with emphasis for potential incumbents to possess a Diploma in Educational Management, a PGCE or a Master in Educational Leadership & Management or again, a Certificate in school management for school superintendents-secondary; and

### (iv) *Curriculum Development*

The quality of education is indeed dependent on the provision of a quality curriculum. In fact, the need to review the function of curriculum development and the necessity to provide Mauritius with a strong base for primary and secondary education is more than ever strongly felt today. Lately, the MIE has been entrusted with the development of the Primary National Curriculum Framework, as well as the Curriculum Framework for the Secondary and Pre-Vocational Education.

### **3.4.2. Overall Goal**

Facilitating professional development of all personnel, and increasing efficiency, effectiveness and accountability at all levels in schools.

### **3.4.3. Critical Challenges**

1. Improve the professional qualification of all cadres in primary and secondary schools
2. Provide suitably qualified personnel with sound pedagogical and administrative skills and competencies.
3. Develop capacity for improved leadership skills for effective management of schools
4. Develop focused programmes for dealing with emerging issues and problems including indiscipline.
5. Infuse a culture of continuous professional development among school personnel through mandatory attendance to workshops and training seminars during school holidays
6. Empower schools to take up responsibility for in-house professional development of all staff and the development of a strong community of practice within schools.
7. Develop a career path for school personnel through increased opportunity to engage in professional development
8. Make schools become true institutions of learning with a view to reducing dependence on private tuition.
9. Develop a culture of research among school personnel and infuse findings from teacher research for the betterment of schools.
10. Strengthen the function of curriculum development along with teacher education and research.

### **3.4.4. Strategic Goals**

1. Offer a wide range of responsive, flexible, high quality and challenging teacher education programmes in line with international norms and standards.
2. Give a greater thrust to special education needs.
3. Ensure transferability, sustainability of training undertaken by teachers, recognition and dissemination of good practices through the creation of a community of practice at school's level.

4. Strengthen partnership with all stakeholders in education for effective support of teaching and learning in schools.
5. Ensure accountability of school leaders.
6. Review entry qualifications and modes of selection for all cadres in education and increase opportunity for continuous professional development in the sector.
7. Further strengthen and develop Distance Education
8. Develop a comprehensive HR strategy for training in the sector.
9. Further invest in Strategic and Action Research in education.
10. Strengthen MIE as an Institution of excellence in Teacher Education, Research and Curriculum Development.

### 3.4.5. Summary of Strategic Activities

#### **Teacher Education**

The Ministry is committed to the provision of lifelong opportunities for all cadres in the education sector. This will take the form of formal pre-service, in-service and flexible modes of continuous professional development so as to enable all school personnel to be well tuned with emerging issues, knowledge and skills needed in a world that is in a constant state of flux and that demands continuous adaptability.

#### **Special Education and gifted children**

The Ministry will give more attention to children with special needs. This will concern children who are physically less able, as well as children with learning difficulties. It will provide equality of opportunity to all with the introduction of early remedial measures so as to decrease the incidence of failure in the long run. Provision will also be made for giving particular attention to gifted children.

#### **Sustainability & portability of training**

Major emphasis will be placed on the sustainability and portability of what teachers acquire during their training period. This will ensure that there is a translation of what teachers learn in the training institution and through diverse modes of continuous professional development into the classroom. School heads will be required to ensure a sound pedagogical follow up to that end.

#### **Developing partnership**

Education of the child is embedded in an interaction with a multiplicity of partners outside the school. The support of all partners likely to contribute towards the improvement of teaching and learning will be sought.

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### **Diversification of modes for training**

In order to increase access and equity, the Ministry will explore possibilities for incorporating diverse modes of training, face-to-face, distance modes as well as maximising on the use of ICT for creating virtual classrooms. This will help to optimise resources available in the education sector today.

### **Research**

The importance of research for informed policy decision as well as transformed classroom practices will be given an additional boost. This will help to give voice to a larger number of people and many practitioners in the field.

### **Curriculum Development**

Curriculum development will be a dynamic and ongoing process to respond to emerging needs of society at large.

### **Governance & Accountability**

Major emphasis will be placed on developing sound governance and accountability at all levels, be it the teachers in the classroom, the heads of schools, the inspectorate cadre, the training institution or the personnel of the Ministry.

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### 3.4.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
1. Offer a wide range of responsive, flexible, high quality and challenging teacher education programmes in line with international norms and standards.	1.1 Develop national standards for teacher education at all levels.	National Standards approved and operational by 2009.	Set up work team to develop national standards
	1.2 Revisit existing and develop new programmes in response to identified and emerging needs	Programmes revisited and developed.	Setting up of a standing committee that will also consult stakeholders.
	1.3 Accelerate frequency of courses through diversified modes of delivery, including a significant input of ICT.	50% of courses offered will incorporate ICT support by 2010.	Online and interactive system in place.  Instructional designing, piloting and consolidation of online support.
	1.4 Accreditation of training programmes with international institutions in order to ensure their currency and recognition worldwide.	Links with International Institutions of repute established for ensuring external accreditation of all training programmes by 2012	Establish links for external accreditation of programmes
	1.5 Setting up of a Educator's Council	Educator's Council in place in 2009	Consultation with stakeholders for development of a legislative and institutional framework.

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
2. Give a greater thrust to special education needs	2.1 Implementation of Special Needs Policy for disabled children, children with learning difficulties as well as gifted children	Special Needs policy finalised and operational in 2009	1. Consultation on Special Needs Policy for children with Learning Difficulties and gifted Children.  2. Capacity building and training programmes mounted.
		All teacher education programmes have Special Needs components by 2009	Provision of resources for effective implementation of special needs education.
		Remediation system in place in 5 percent schools by 2009. System tested, improved and fully operational in 20% of the schools by 2010.  Remediation system fully operational in all schools in 2011.	Remedial Education teachers trained and posted in all schools.  Continuous support and follow up of Remedial Education teachers in schools
	2.1 Provision of counselling services in schools	Counselling services piloted in 2008/09 and fully operational by 2010.	1. Piloting and generalising Counselling Services.  2. School personnel initiated into making effective use of counselling services

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
	2.2 Devise a policy for involvement of parents and other stakeholders as partners for supporting children with special needs	Policy approved by end of 2008 and operational in 2009	Legal framework and institutional guidelines in place and operational.
<b>3. Ensure transferability, sustainability of training undertaken by teachers, recognition and dissemination of good practices, through the creation of a community of practice at school's level.</b>	3.1 Develop a follow-up system to support trained teachers at school	School Heads, mentors and rectors trained to provide pedagogical leadership	Training of Head Teachers, mentors and Secondary School Rectors as well as Inspectors.
	3.2 Creation of a Quality Assurance Division	QA cadre recruited and trained by 2009.	Appointment, training and support for QA cadre set up.
		QA system fully operational in 2010	1. Legal framework in place.  2. Stakeholders informed and system operational.
	3.3 Establish a networking and reporting mechanism that feeds back into the process of curriculum development and teacher training.	Inspectorate ensure monitoring and feedback on pedagogical practices	Director in charge of Inspectorate ensures effective reporting and feedback system in place.

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
	3.4 Organise workshop to disseminate good practices.	Policy developed; roles of each stakeholder defined and system operational by 2010.	Piloted in 2009 and fully operational in 2010.
	3.5 Help schools develop their own community of practice for Educators so as to have more positive impacts on teaching and learning.	Operational plan and alternative models for the development of schools as community of practice for teachers provided  Together Educators develop and share good practices.	Piloted in 2009 and fully operational in 2010.
<b>4. Strengthen partnership with all stakeholders in education for effective support of teaching and learning in schools.</b>	4.1 Devise and implement school/community outreach programmes involving all stakeholders.	School/Community outreach programme fully operational in 2010.	School/Community outreach programme designed and piloted in 2008/2009.
	4.2 Infusion of school community component in all teacher education programmes.	Trainee teachers engage in school community outreach programme 25% by 2010 50% by 2011 100% by 2012	Policy to facilitate such infusion at school level devised and approved
	4.3 Develop Parental Education programme	Ministry, jointly with MIE and MCA develops Parental Education programme. Piloted in 2009 and fully operational in 2010.	Development of parental education programme using distance mode.  Sensitisation of all key stakeholders.

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<b>STRATEGIC GOALS</b>	<b>STRATEGIC OBJECTIVES</b>	<b>2008-2020 TARGETS/INDICATORS</b>	<b>ACTIVITIES</b>
	4.4 Reinforce partnership between different stakeholders in education so that they all work towards a common goal.	Collaboration between MIE, QA division, Zone Directors, Heads of Schools, Managers of Schools, NGOs and other stakeholders	Ministry facilitates collaboration and ensures that all stakeholders collaborate through a virtual platform, as well as a bi-annual meeting of all stakeholders.
<b>5. Ensure accountability of school leaders.</b>	5.1 Devise policy for performance management so as to ensure accountability of all personnel within the system of education.	Performance management system in place. Pilot basis in 2009. Fully operational in 2010	Development and dissemination of performance management system
	5.2 Ensure that school leaders are given autonomy, decision making power and are made accountable for the proper management of the school.	Guidelines in place Schools leaders apprised and trained. Operational by 2009.	Guidelines developed and communicated Workshop for training of personnel.
	5.3 Ensure that all schools have a School Developmental Plan (SDP) that involves all cadres	SDP in place as from 2009	School leaders trained to develop their respective SDP

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
<b>6. Review entry qualifications and modes of selection for all cadres in education and increase opportunity for continuous professional development in the sector.</b>	6.1 By 2010 entry qualification in Pre-Primary sector will be an 'O' level plus Pre-primary Certificate in Education. Subsequently entry qualification will be 'A' level.	New Entry Qualification in place	Entry qualifications reviewed and agreed with all key stakeholders by end of 2008.
	6.2 By 2016 it is desirable that entry requirement be upgraded in primary sector to a B.Ed in Primary Education.	Entry qualification upgraded in phases: 2010: All Diploma 2012: 25% Degree 2014: 50% Degree 2016: all Degree	Phased changes as from 2010
	6.3 All in-service teachers in secondary schools should have a post degree professional qualification in education.	2010: All degree 2012: 50% Degree plus PGCE/B.Ed 2014: 100% PGCE/B.Ed	Diverse modes of training.
	6.4 Reinforcement of pre-service training in the secondary sector	Additional boost to Educator's licence, Pre-Service PGCE, Teacher's Diploma and B.Ed	Programmes reviewed and on offer regularly
	6.5 Introduction of a system of recertification in place	2012: Re-Certification initiated.	Modes of recertification discussed and approved by all key stakeholders by end of 2009.

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
	6.6 Provide a variety of pathways for all personnel in education for Continued Professional Development (CPD)	Pathways defined  Policy for CPD in place	Policy developed and approved.
<b>7. Further strengthen and develop Distance Education</b>	7.1 Develop a comprehensive plan for inclusion of distance mode in teacher education	Mixed mode including DE mode in place and fully operational by 2009	Phased Inclusion of DE developed mode.
	7.2 Additional technical and pedagogical facilities for development of materials using for distance learning programme for teachers at the MIE.	Mixed mode in place. In a phased manner as from 2009.	Provision of infrastructural and financial facilities for developing MIE's Unit of Distance Learning.
<b>8. Develop a comprehensive HR strategy for training in the sector.</b>	8.1 Development of a database of all teaching, management and other personnel in schools/colleges so as to arrive at a realistic long term staff development plan.	2009: complete database available on all personnel and institutions in education.	2008: Statistical division thoroughly reviewed to enable the provision of reliable database for policy decision

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/INDICATORS	ACTIVITIES
<b>9. Further invest in Strategic and Action Research in education.</b>	9.1 Reinforce a positive research climate and culture among academics through strengthening research units.	At least one major research geared to Teacher Education each year.  Action Research publications initiated by 2009.  Establish priority areas for research.	1. Research Unit strengthened at the MIE.  2. Networking with other stakeholders- local and international.
	9.2 Encourage team research and interdisciplinary research involving stakeholders at national and international levels.	Research on teacher education and teaching and learning in schools are carried out by MIE personnel in collaboration with other TEIs, both locally and internationally.	1. Guidelines established.  2. Research activities in place.  3. Provision for funding established.
	9.3 Ensure that research findings inform teaching and learning practices, curriculum development and policy in education.	System for continuous dissemination of research in place.	1. Research findings regularly fed back into schools, curriculum development and policy decisions.  2. Establishment of the appropriate fora for dissemination of research findings.
<b>10. Strengthen MIE as an Institution of excellence in Teacher Education, Research and Curriculum Development.</b>	10.1 Strengthen role of MIE in Curriculum development	MIE entrusted with the function of curriculum development  Curriculum Resource Centre operational at MIE	MIE takes over the responsibility for development of curriculum framework and curriculum materials.
	10.2 Upgrading of MIE to a University status.	MIE awards its own degree.	1. Quality Mechanism strengthened at MIE  2. Legal framework is reviewed to enable it to grant its own Degree.

### **3.5. *TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING SUBSECTOR—FOSTERING LIFELONG EMPLOYABILITY***

#### **3.5.1. Situational Analysis**

The importance of the quality of the workforce in order to sustain economic and social development in Mauritius is widely recognised by all stakeholders.

Technical and Vocational Education and Training (TVET) is increasingly resorted to as a policy instrument to address the need for skilled manpower in both existing and emerging economic sectors to be able to compete globally. It is also called upon to play an active role in the fight against poverty. The target population is increasing in diversity and encompasses both labour market entrants and in-service members, with wide ranging educational and social characteristics.

Changing technology and work organisation call for continuous upgrading of knowledge and skills, in a lifelong learning environment. The TVET system needs to respond to all these challenges.

The setting up of the Industrial and Vocational Training Board (IVTB) in 1988 constituted a major landmark in the development of technical and vocational training in Mauritius. The necessary regulations and institutional framework was put in place for the registration of private training institutions, part-financing of training through the one percent levy on payroll, and the planning and development of publicly-funded training institutions. This resulted, inter alia, in an increase in access to TVET, greater diversity and levels of training on offer, strengthened public-private partnership in policy making, programme design, delivery and evaluation.

The Technical School Management Trust Fund, set up in 1990, has also contributed in promoting and in increasing access to technical education through the three polytechnics, operating under its aegis, namely Lycee Polytechnique Sir Guy Forget, Swami Dayanand Institute of Management, and the Institut Supérieur de Technologie.

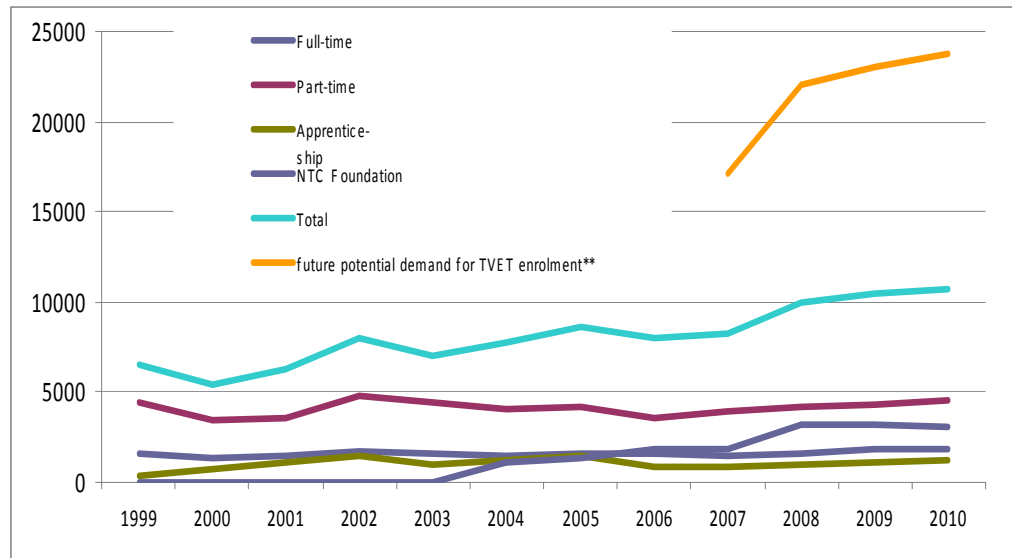
Some of the training programmes offered by the IVTB and the TSMTF have the same objectives and lead to similar qualifications, thus leading to duplication of facilities and resources.

In addition to the two main public providers of TVET (IVTB and TSMTF) there are about 350 private training institutions, registered with the Mauritius Qualifications Authority, which offer training mainly in management and information technology.

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Enrolment in TVET classes<sup>33</sup>, has been rising steadily, with total enrolment in all classes - at all levels - rising to reach 8,590 in 2007 and predicted to continue to increase steadily in future years (see Figure 27 below).

**Figure 27: Total Enrolment in TVET, Actual (1999-2007) and Projections (2008-2010)**



Enrolment in TVET classes<sup>34</sup>, has been rising steadily, with total enrolment in all classes - at all levels - rising to reach 8,590 in 2007 and predicted to continue to increase steadily in future years.

However, it is estimated that, due to the lack of capacity in terms of both facilities and teachers, the unmet demand for places on TVET courses is very high and predicted to continue to rise if the capacity to meet this demand is not met. Currently, it is estimated that less than 50% of demand is being met<sup>35</sup>. Needless to say, this will have an ultimate impact on the labour market needs in the medium and long term.

Despite significant progress achieved in TVET in the last two decades, the TVET System in Mauritius is characterised by some weaknesses as follows:

- There is a poor perception of the value and status of TVET programmes
- Training provision is in some cases supply-led and needs to be aligned with labour market needs
- Too many certification awarding systems leading to confusion at the level of end users
- Problems of regional as well as international recognition of certificates are inherent
- There is a tendency to use TVET to react to present needs rather than building capabilities for the future
- The employment rates of graduates in some trades are relatively low

<sup>33</sup> Provided by both IVTB and TSMTF.

<sup>34</sup> Provided by both IVTB and TSMTF.

<sup>35</sup> However, the data available currently needs to be re-defined since there is no clear distinction at the moment as to which data are included in TVET calculations and which in TEC calculations.

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- The technical, vocational education and training system is not well integrated. A fragmented approach has led to poor co-ordination between skills providers leading to duplication and gaps
- TVET has remained trainer centred, whilst the trend is now more towards learner-centred pedagogy
- Access to TVET is limited
- Relatively low female participation in TVET programmes coupled with a concentration in a few trades
- It is difficult to recruit trainers in certain trades leading to trainers with insufficient industrial experience. On the other hand, a high turnover of trainers has been noted in certain trades
- Insufficient funding is allocated to TVET
- Not enough autonomy exists at the level of training centres.

The need to separate the functions (regulating, facilitating and provision) led to the setting up of the Mauritius Qualifications Authority in 2001 and to the Human Resource Development Council in 2003, and allowing the IVTB to focus on its role of enhanced provider of TVET.

With a view to rationalising qualifications and providing for pathways and recognition, the MQA has set up a 10-level National Qualifications Framework, which includes a segment pertaining to the TVET/workplace sector.

In addition to responding to the needs of the new labour market, TVET is increasingly being solicited to address existing and emerging needs in the context of lifelong learning, continuing education and training, training of unemployed, retrenched workers, targeted training for women and disadvantaged groups, and the necessity to provide 'second chance' options for acquiring qualifications are adding to the complexity and challenges facing the TVET sector.

### 3.5.1.1. Policies

The Government Programme (2005-2010) states that educational reforms must include skills enhancement and vocational training as part of the universal provision of quality education. It also mentions the setting up of new polytechnics (Instituts de Formation et d'Education Tertiaire - IFETs) which will provide post SC training leading to a Higher National Diploma in areas like tourism, agro-industry, electronics and information technology.

As part of the reform in TVET, the legal and institutional framework will be reviewed to provide for only one body to be responsible for the management of TVET, i.e, the Mauritius Industrial and Technical Training and Education Council (MITTEC). This will address, inter alia, the issue of duplication between the IVTB and the TSMTF. It will also ensure a judicious allocation of resources and greater accountability. Some IFETS will be operating under the aegis of MITTEC.

New Knowledge Based Training Centres will be set up such as at the ex-BAT building in Port-Louis.

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All young people under 21 years who are not in full-time education or full-time employment will be able to benefit from the Second Chance Programme. The Programme aims to provide basic numeracy and language skills and orient these young people to a vocational programme. It will be financed under the Human Resource Development, Knowledge and Arts Fund.

At the end of Form IV a pathway will be introduced to help students opt for tertiary vocational education or for tertiary academic studies

### **3.5.2. Overall Goal**

An efficient and effective TVET system responsive to the present and future needs by providing a skilled and flexible workforce for sustainable development.

### **3.5.3. Critical Challenges**

In the wake of globalisation and the development of a knowledge-based economy, the TVET sector is facing serious challenges which call for reforms aimed at improving governance, access, financing, quality and relevance, role of the private sector (private training institutions and employers) and the acquisition of skills in a non-formal or informal environment. The critical challenges facing TVET may be highlighted as follows:

1. Improving the perception of TVET which suffers from the stigma of a track fit only for the academically less endowed and representing a 'dead end'
2. Ensuring a balance between the objective of developing employable skills to help alleviate poverty and acquisition of knowledge and skills for global competitiveness
3. Ensuring greater and more effective responsiveness of TVET to existing and emerging labour market needs
4. Creating articulation pathways between TVET and general education
5. Developing a lifelong learning culture
6. Assuring greater and more active participation of key stakeholders, particularly employers, in the development of TVET.
7. Rationalisation and optimum use of resources

### **3.5.4. Strategic Goals**

1. Increased access and improved equity in TVET
2. Improved articulation between TVET and mainstream education
3. Enhance the quality and relevance of TVET
4. Strengthen management of the TVET system
5. Sustained funding for TVET
6. Make Mauritius a Regional Hub for TVET

### 3.5.5. Summary of Strategic Activities

#### **Increased access and improved equity in TVET**

More training centres will be set up, which will result in increased enrolment. The target population will be enlarged to provide for “second-chance programme” for all young people under 21 who are not in full time education or full-time employment. The apprenticeship mode of training will be extended to more trades, with greater participation of employers. With increasing feminisation of unemployment, it is essential that female participation on training programmes be increased, through sensitisation campaigns and adaptation of contents and pedagogy to suit their needs.

#### **Improved articulation between TVET and mainstream education**

In order to change the “dead end” image of TVET, pathways will be established to enable TVET graduates to pursue tertiary education. This will be facilitated by the development of a credit accumulation and transfer system, and a wider application of recognition of prior learning

#### **Enhance the quality and relevance of TVET**

In order to ensure that the training programmes offered are in line with the requirements of industry the curriculum will need to be reviewed at regular intervals. Industrial attachments will need to be integrated in all the programmes. Trainers will be required to spend some time in industry to get acquainted with latest technologies and work organisations. Norms and standards for the accreditation of training institutions will be reviewed in line with international best practices.

#### **Strengthen governance and management of TVET system**

With a view to improving the coordination mechanism and avoid duplication of training facilities and resources, the IVTB and the TSMTF will be merged to form the MITTEC. The managerial skills of managers of training centres will be improved in order to enhance their efficiency and effectiveness. For the training programmes to be effective and result in employment of the graduates, training centres will need to forge strong partnerships with industry to know the latter’s needs, investment plans and technological changes

#### **Sustained funding for TVET**

More resources would be required to expand training. Government alone cannot provide the bulk of funding for training and alternative sources need to be explored.

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### **Make Mauritius a Regional Hub for TVET**

In view of the expertise that Mauritius has developed over the years in TVET and the demand for skilled workers in the region, some of the training centres have the potential of opening up to participants of other countries.

Expertise not available locally could be tapped through collaboration with international partners. It is also important that the skills and knowledge being developed through the training programmes be benchmarked with those of other countries, and best practices adopted.

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### 3.5.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
<b>1. Increased access and improved equity in TVET</b>	1.1 To increase access to TVET for both youth and adults	Total enrolment on full-time, part-time, and apprenticeship increased by 50% by 2010 and double by 2015	1. Expand training through the Apprenticeship mode  2. Design, develop and run flexible programmes with multiple entry and exit  3. Setting up IFETs  4. Setting up of new Training Centres  5. Reinforce professional orientation and counselling in TVET  6. Design, develop, and implement second chance programme  7. Conversion of ex-BAT facilities into a Knowledge Based Training Centre
	1.2 To implement training programmes for targeted disadvantaged groups	Total female enrolment increased to 40% in 2020  Increased enrolment of disadvantaged groups	1. Encourage female participation in all training programmes  2. Develop and implement bridging courses for low achieving students

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>3. Identify (and survey the training needs of ) disadvantaged groups</p> <p>4. Implement outreach programmes</p>
<b>2. Improved articulation between TVET and mainstream education</b>	2.1 Develop clear pathways between TVET programmes and mainstream education	Opportunity to all eligible graduates to access tertiary education provided by 2015	<p>1. Develop and implement a Credit Accumulation and Transfer system as part of the National Qualifications Framework</p> <p>2. Develop capacity within IFETs to offer degree courses as affiliated institutes to local universities</p> <p>3. Introduce RPL in a wider number of fields and sectors</p> <p>4. Broaden the scope of Trade testing</p>
<b>3. Enhance the quality and relevance of TVET</b>	3.1 To ensure that training responds to labour market needs	<p>Employment rate of graduates to reach at least 80% in 2010</p> <p>All training institutions to comply with the revised norms and standards by 2012</p>	1. Consolidate workforce planning and projection with a view to identify and meet the demand of existing and emerging sectors

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>2. Review curricula to make them more demand-driven and wherever applicable incorporate an element of industrial placement as part of the programme</p> <p>3. Increase flexibility of curricula</p> <p>4. Improve training evaluation mechanism</p> <p>5. Strengthen quality assurance system</p> <p>6. Upgrade technical and pedagogical skills of trainers</p> <p>7. Introduce entrepreneurship module on TVET programmes</p> <p>8. Review norms and standards to ensure that quality of training institutions/programmes are of international standards</p>
<b>4. Strengthen Management of TVET System</b>	<p>4.1 To ensure more effective coordination of public provision of TVET</p> <p>4.2 Strengthen public-private partnership</p>	<p>MITTEC to become effectively operational in 2009.</p> <p>An enhanced quality management system in place by 2010</p>	<p>1. Setting up of MITTEC</p> <p>2. Ensure greater autonomy and active participation of private sector in the management of training centres</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
		<p>At least 5% of trainers coming from industry by 2010</p> <p>Each training centre/IFET to have set up their Management Committees by 2010</p>	<p>3. Rationalise training facilities</p> <p>4. Implement a robust Quality Management System</p> <p>5. Reinforce skills of managers of IFETs</p> <p>6. Explore greater possibility of sponsorship from industry</p> <p>7. Set up commercial arms in order to generate revenue by July 2008</p> <p>8. Enlist more professionals from the industry as part-time trainers</p> <p>9. Develop joint partnership with private sector to offer training in areas where no expertise is available in public training centres</p> <p>10. Enhance workplace training</p>
<b>5. Sustained Funding for TVET</b>	5.1 To ensure that adequate funding is available for the development of TVET	<p>Funding of TVET from training levy increased</p> <p>Alternative sources of funding for TVET mobilized</p>	<p>1. Use part of the training levy to fund training activities</p> <p>2. Review the funding mechanism in line with performance-based budgeting</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>3. Explore the possibility of tapping funds available under the Empowerment Programme</p> <p>4. Mobilise funding through development partners</p>
<b>6. Make Mauritius a Regional Hub for TVET</b>	<p>6.1 Develop capability for Mauritius to emerge as a regional hub in TVET</p> <p>6.2 Benchmark with international best practices</p>	<p>At least 7 MOUs signed and implemented with reputed institutions by 2010</p> <p>10% of trainees on diploma courses to come from the region by 2010</p>	<p>1. Market the training expertise and facilities of Mauritius in the region</p> <p>2. Reserve seats for some candidates coming from the region</p> <p>3. Host regional workshops along different themes of TVET.</p> <p>4. Enhance responsiveness to demand for training in the region</p> <p>5. Develop and sign MoUs with international training institutions/organisations of high international repute with a view to exchange staff and to run short training programmes where no expertise is available locally.</p> <p>6. Integrate membership of well respected relevant international professional associations.</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>7. Participate regularly in regional training events.</p> <p>8. Set up an online interactive platform for sustaining international collaboration.</p>

### **3.6. TERTIARY EDUCATION SUBSECTOR—DESIGNING THE FUTURE-THE HIGHER LEVELS OF KNOWLEDGE**

Tertiary education plays a crucial role in the Mauritian economy by virtue of its centrality in providing an educated, well trained, adaptable and innovative workforce. The development of Mauritius into a Knowledge Hub and a Multi-disciplinary Centre of Excellence resides in a sharpened focus on the tertiary education sector.

The future scenario of tertiary education in Mauritius can only be worked out keeping a number of factors in mind as there is an increasing demand for greater participation and widened access to tertiary education of international quality and standards from learners, who look upon it as gateway to social and economic mobility.

#### **3.6.1. Situational Analysis**

Tertiary Education is expected to contribute significantly in building the skills and intellectual capacity of the country to enable it to sustain its development and creating a knowledge-based economy.

*The Tertiary Education Set-up:* The Mauritian tertiary education landscape has made major strides since the country's accession to its independence in 1968, when there existed only one tertiary institution in the country namely the then newly created University of Mauritius. The Sector today encompasses two public universities, two polytechnics and a range of other publicly-funded tertiary education institutions, as well as a number of private, regional and overseas institutions. Each of these institutions have its own specificity; some providing tertiary education in a wide range of disciplines and levels, while others focus their activities on only one or two areas, at certain levels. A number of these institutions are based overseas, with their provisions made available through a local partner by means of the distance education mode.

Within the public sector, tertiary education revolves around the University of Mauritius (UoM), the University of Technology, Mauritius (UTM), the Mauritius Institute of Education (MIE), the Mahatma Gandhi Institute (MGI), the Rabindranath Tagore institute (RTI), the Mauritius College of the Air (MCA). Overseeing the six tertiary education institutions (TEIs) is the Tertiary Education Commission (TEC) which, *inter alia*, has responsibility for allocating public funds, and fostering, planning and coordinating the development of post-secondary education and training. The TEC has since 2005 also been mandated to implement a regulatory framework for ensuring the quality of post-secondary education, and determine the recognition and equivalence of post-secondary qualifications. As per the regulatory framework provided through the amendments in the TEC Act in 2005, the TEC is responsible for dealing with all applications for the establishment of private institutions, or branches, centres or campuses of overseas institutions offering postsecondary education in Mauritius. Furthermore, no

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postsecondary educational institution can operate without being registered and its programmes accredited by the TEC.

Two polytechnics, managed by the Technical School Management Trust Fund (TSMTF) also operate within the public sector. They are the Swami Dayanand Institute of Management (SDIM) and the "Institut Supérieur de Technologie" (IST). The Industrial and Vocational Training Board (IVTB) and the Mauritius Institute of Health (MIH) equally dispense tertiary level programmes in selected areas.

A third university, the Open University of Mauritius (OUM) is in the process of being established to promote access through the mixed mode of open and distance learning (ODL) and face-to-face, to provide opportunities for non-traditional learners, as well as promote lifelong learning and adult and continuing education.

In addition to the above publicly-funded institutions (PFIs), 44 private institutions (July 2008) offer tertiary-level programmes locally mostly in niche areas like Information Technology, Law, Management, Accountancy and Finance. A majority of these private institutions operate on a part-time basis, in the evenings and during weekends with relatively small student cohorts. Their programmes are awarded by overseas institutions. These are being offered through franchise agreements whereby the overseas institutions provide programme materials and/or tutorial support.

The local tertiary education scene also comprises three tertiary education institutions with a regional vocation, namely the "Institut de la Francophonie Pour L'Entrepreneuriat" (IFE), the Sir Seewoosagur Ramgoolam Medical College (SSRMC) and the Mauras School of Dentistry.

*Financing and Cost:* With the exception of the UTM which charge fees to students, the other publicly-funded TEIs do not charge fees on their full-time programmes. In general, the budget of these public institutions is financed in a large measure through the Government Recurrent Grants and the fees they charge for part-time courses carry a high subsidy element. In the case of private institutions, fees, partly influenced by supply and demand, are unregulated, with students bearing the full cost. Likewise, students pursuing their studies in universities overseas are self-financed, with the exception of a few who receive undergraduate scholarships and bursaries from public/private sector and donor countries.

*Enrolment:* The provision of tertiary education extends beyond the local boundary given that about 27.2% of Mauritian students in 2007 pursued their higher studies in institutions overseas. Enrolment in the publicly-funded TEIs, on the other hand, constituted 45.4% of the total enrolment, the remaining comprised of students studying in private institutions and/or through the distance and open learning mode with an institution overseas (27.4%). As at December 2007, the total tertiary student population was estimated at 35,023, representing a GTER of 37.3%, computed on the basis of the population aged 20 to 24 years.

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*Programmes:* Some 500 programmes ranging from Certificate to PhD were offered locally of which about one in three were full-time. The PFIs accounted for some two-thirds of the number of programmes and private/distance education providers, the remainder. Although the provision of postgraduate programmes has increased in recent years to stand presently at about 17% of courses, it is still insufficient considering the growing trends for employers to look for people with specialized skills.

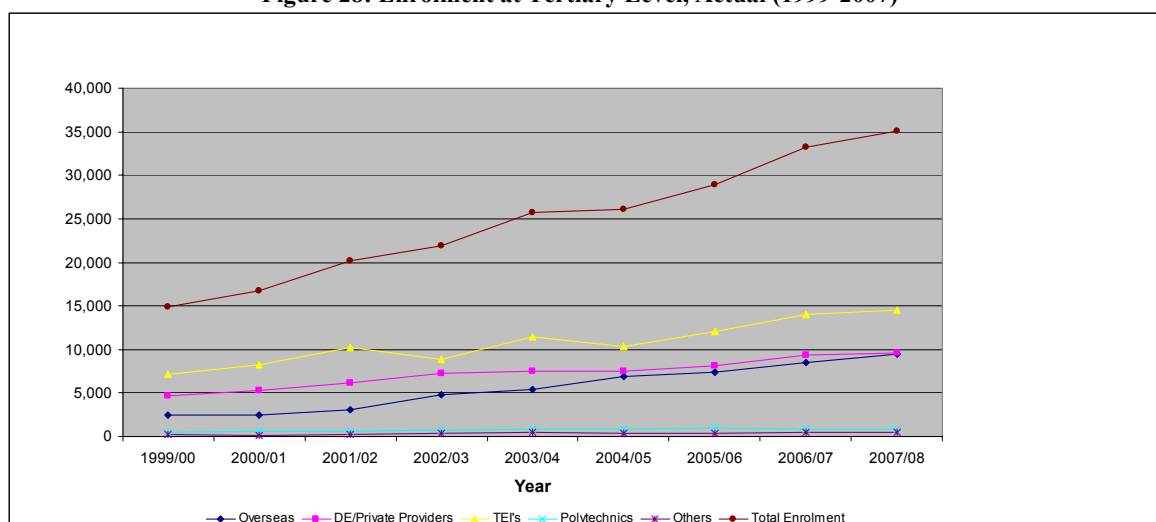
*Staff:* The number of persons working in the tertiary education sector was estimated at about 2,265 in 2007. The ratio of academic to non-academic staff and academic to administrative in the PFIs stood at 1: 2.7 and 1:1.2 respectively

*Output:* An estimated total of 6600 awards were made at the tertiary level in 2007. Some 4400 awards were conferred by the publicly funded TEIs, of which some 21.4% were postgraduate degrees, 38.1% degrees, 36.4% diplomas and 4.1% certificates. Of the remainder, an estimated 1,400 awards (mostly graduate and postgraduate) emanated from students in universities overseas; and 800 from students studied locally in private institutions/distance education mode.

### 3.6.1.1. Tertiary Education

As with the case of TVET, enrolment in tertiary education has been growing strongly in recent years, to reach total enrolment of 35,023 in 2007 (see Figure 28 below).

Figure 28: Enrolment at Tertiary Level, Actual (1999-2007)



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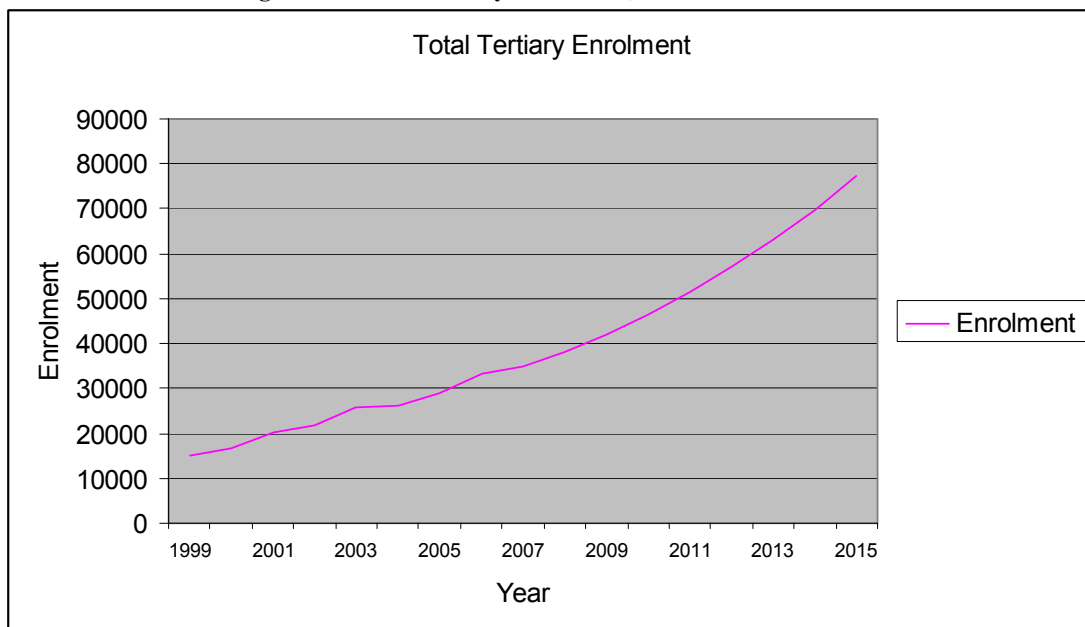
However, characteristic of this sector is that there is a very high demand that is not being met nationally 'forcing' a very large number of young Mauritians (currently totalling 9,531) to seek study opportunities abroad. These students are primarily self-financed. The total demand for tertiary level education is predicted to increase from the present 35,023 to some 77,000 by 2015. This is shown in Table 1 below:

**Table 1: Projected enrolment in Tertiary Education 2008 -2015**

YEAR	PROJECTED TERTIARY EDUCATION ENROLMENT	PROJECTED GTER
2008	38008	41.1%
2009	42077	44.6%
2010	46582	48.2%
2011	51469	51.3%
2012	57090	54.8%
2013	63203	59.1%
2014	69970	64.9%
2015	77461	72.0%

As a result of the above the GTER is expected to rise from the present 37.3% to reach 72% (see Figure 29).

**Figure 29: Total Tertiary Enrolment, Actual and Predicted**



### 3.6.2. Overall Goal

The main objective for the tertiary education sector is to make Mauritius a Knowledge Hub to serve the Region and a Centre for Higher Learning and Excellence.

### 3.6.3. Critical Challenges

1. Increased and widened access to tertiary education
2. Enhance the quality of tertiary education to attain international standards
3. Improve the relevance of tertiary education to make it more responsive to the needs of the labour market
4. Improve effectiveness and efficiency of tertiary education institutions
5. Improve links between the Tertiary Education Institutions and the community
6. Optimal use of financial resources
7. Develop a strong sense of nation-building so as to nurture patriotism in students

### 3.6.4. Strategic Goals

In light of the main objectives and challenges above, the Government's strategy during the period 2008-2020 will be to create an enabling environment for Mauritius to emerge as a Regional Knowledge Hub and a Centre for Higher Learning and Excellence. In line with this strategy, policies for tertiary education will aim at:

1. Increasing and widening access and ensuring equity
2. Enhancing quality and relevance
3. Ensuring financial sustainability
4. Strengthening sector capability
5. Meeting student needs
6. Facilitating research for national development
7. Enhancing linkages between TEIs and the Economic Sectors
8. Creating an effective national knowledge and innovation system
9. Internationalization of Mauritian Tertiary Education

### 3.6.5. Summary of Strategic Activities

#### **Increasing and Widening Access and Ensuring Equity**

The development of a knowledge-based economy will require a sustained supply of quality human resources. Government's policy is to raise the Gross Tertiary Enrolment Rate (GTER) to 72% by 2015, in line with countries at similar stage of development as Mauritius. In this regard a number of activities are planned as follows:

- (a) Increasing enrolment in the publicly-funded TEIs
- (b) Greater use of ODL and new technologies
- (c) Encouraging greater participation of private institutions
- (d) Establishment of brand name overseas institutions or their affiliates/centres/ branches in Mauritius
- (e) Promotion of access to under-represented group

#### **Enhancing Quality and Relevance**

The success of transforming Mauritius into a Regional Knowledge Hub rests on its reputation as a quality destination for tertiary education. This will require measures that help maintain international standards, public confidence and integrity of the tertiary education sector. In this regard, the TEC will continue to monitor quality of all post-secondary education provisions through institutional audits of the public TEIs and registration and programme accreditation of private institutions. In parallel, the framework for quality assurance for the sector will be constantly reviewed to reflect changes and new developments in the sector.

In order to ensure that academic programmes are aligned with the human resource needs of the country, the List of Indicative Priority Fields of Study will be regularly updated so as to guide local institutions to plan their course provision in line with the requirements of the labour market. A Programme Planning committee will be set up to review existing programmes and updating curricula on a regular basis and building new capabilities to respond to changing needs.

#### **Ensuring Financial Sustainability**

The development of a knowledge hub requires innovative measures so as to ensure that public institutions are not deprived of much-needed resources for their future development. Presently, there is an over-reliance on the part of the public TEIs, apart from the UTM, on the Government for their financing. The present system of funding is turning out to be increasingly unsustainable owing to the growing demand for places, on the one hand, and escalating costs, on the other. With these developments, pressure is mounting for diversifying the funding sources of these publicly funded TEIs. One of the intended measures will be to adopt some form of cost sharing arrangements. The funding generated as a result will be used for meeting new needs in terms of infrastructure, material and equipment as well as teaching resources. A Special support scheme in the form of bursaries will be

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introduced for needy students and those with disabilities. A National Student Loan Scheme will also be set up to support other categories of students.

### **Strengthening Sector Capability and Optimal Use of Resources**

A key requirement of the knowledge economy is the availability of a vibrant, skilled and knowledgeable, capable and motivated human resource, both academic and non-academic, in the sector that is able to respond positively to the challenges ahead. New recruitment policies will be implemented which confers greater flexibility in appointments to the tertiary education institutions, in fixing the terms and conditions of employment so as to be able to attract appropriately qualified and experienced persons from industry, the professions and the public sector as well as reputed overseas professors in the emerging fields to lead Centres of Excellence. Concurrently, measures will be taken to retain leading and quality academic staff. Equally, mechanisms will be developed for joint institutional appointments, inter-institutional staff exchanges and secondments.

A Committee on Infrastructure Development and Resource Utilization will be set up to ensure the optimal use of existing and future resources (e.g. library, lecture rooms, sports facilities, etc) and the pooling of resources with regard to common facilities.

### **Meeting Student Needs**

Measures will be taken to promote the highest quality of teaching and learning environment through regular Students Assessment Surveys so that the aspirations of students in terms of educational and extracurricular facilities, quality delivery of programmes are met. It is also proposed to establish a Recognition of Prior Learning Framework to facilitate access to tertiary education of mature students and to lay emphasis on ODL as a model for lifelong learning. In addition, all full-time courses will include work-related learning as well as a common core of employability skills and generic competencies, which are assessment-based.

All the TEIs will publish their Annual Prospectus well in advance of the forthcoming academic year to enable both local and prospective overseas students to plan their education. Halls of Residence will be constructed for students.

### **Promoting Science and Technology (including IT) Education**

The low ratio of scientist to population in Mauritius does not augur well for the future. Hence, the need to produce a critical mass of broad based and specialized scientists during the coming decades to facilitate the emergence of the knowledge economy to serve the region. A new national science policy will be implemented focusing on the expansion and upgrading of science labs, training of lab technicians, new sensitization programmes and updating of current textbooks at the secondary level such that they become feeders to the tertiary education sector. At the tertiary level, students will be given incentives to enroll in science courses.

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TEIs will aim at increasing the number of MPhil/PhD students and create a database of past and ongoing research.

The IT infrastructure and capability of the TEIs will be consolidated and upgraded to respond to the challenge of making ICT the fifth pillar of the Mauritian economy. Computing will become a cross-cutting module in all programmes of study. Incentives will be introduced to encourage teaching staff and student to have their own personal computers and laptops. The TEIs and their campuses will be transformed into wi-fi zones to extract high performance from computers in support of teaching and learning as well as research.

### **Research for National Development**

As an important driver of the knowledge economy, the tertiary education sector will need to lay greater emphasis on research than is the case presently. All the TEIs will be expected to have their Research Plan which is aligned to national priority needs and to adhere to the National Research Ethics Guidelines as well as a code of ethics for research. Inter-disciplinary research between institutions including the private sector will be encouraged. Further, industry and business community will be solicited to provide financial support in the form of grant/contract research to academic staff/postgraduate students to help solve specific issues or innovate in their respective sectors. In parallel, the TEIs will be called upon to diversify their research sourcing through competitive bidding and commissioned research. A database for on-going and completed research projects in the TEIs will be maintained and disseminated. The TEIs will also be accountable for periodic self-evaluation of their research.

### **New Direction for State-funded Scholarships**

A new Undergraduate Scholarship Scheme will be implemented to replace the existing one, whereby scholarship winners will be encouraged to follow undergraduate programmes locally at any university in Mauritius. The existing criteria and conditions for the award of scholarships will also be reviewed and new criteria worked out with a view to satisfying both the merit and equity considerations.

### **Lifelong Learning and Employability**

Within the context of the knowledge economy, lifelong learning will take a new dimension. A four-pronged strategy is accordingly proposed to creating the conditions to enhance lifelong learning opportunities which include the recognition of prior learning and prior experiential learning, the strengthening of ODL capacity in the TEIs, the development of multi-skilling and re-skilling programmes and the conduct of action research in the development of lifelong learning.

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### **New Structural Set-ups**

The existing institutional set-up will be revisited and re-engineered in order to better respond to the country's education and training needs and the vision of making Mauritius a Regional Knowledge Hub. It is proposed to set up Centres of Excellence in areas in which the country has a competitive advantage internationally (e.g tourism, finance, etc). An Institute for Languages will also be created to assist the country to participate in the fast growing language industry and provide service to a wide range of users pertaining to translation, interpretation and communication and assistance to industry in general.

### **Linkages between Tertiary Education and the Economic Sectors**

To ensure the success of the knowledge hub, efforts will be undertaken to strengthen the linkages between tertiary education, the government and industry. Knowledge hubs generate new basic knowledge of relevance to many industries, as well as applied knowledge that is directly and immediately relevant to local industries. They also capture knowledge generated elsewhere, nationally or internationally, and develop this further to meet specific local needs. TEIs will be called upon to design their programmes with the assistance of industry. The private sector will be encouraged to implement new initiatives for promoting tertiary education, as part of their corporate social responsibility.

### **Create an effective national knowledge and innovation system**

To ensure a high quality of life, efforts must be initiated to create and sustain a knowledge and innovation system. The national knowledge and innovation system will enable to transform the Mauritian economy from a material based economy to a knowledge based economy. TEIs will be involved in conducting research for the key sectors of the economy. TEIs will also be involved in the systematic identification of knowledge gaps that inhibit productivity especially in key growth sectors and enhance productivity in those sectors.

### **Internalization of Mauritian Tertiary Education**

To make Mauritius the Intelligent Island of Africa in the Global Village. There is need to capitalise on Globalisation, in the context of which tertiary education has become a designed activity to produced the required human capital to suit the needs of a global labour market, centred around knowledge production. Tertiary education should aim at unleashing the full potential and creativity of the Mauritian people and to lay the foundation for transforming Mauritius into the rank of developed economies. It will empower, uncover and propagate the unique brand that Mauritius represents in the global village as a blend of the best from various civilizations as well as to showcase the multiple unique facets of Mauritius.

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### 3.6.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
1. Increasing And Widening Access And Ensuring Equity	1.1 Increasing the GTER from the present 37.3% to 72% in 2015	2008 - 41%, 2009 - 44.6%..... 2015 - 72%	<p>1. Increasing enrolment in the publicly-funded TEIs</p> <p>2. Encouraging greater participation of private institutions</p> <p>3. Encourage LLL and make greater use of ODL and new technologies to deliver education at the click of a mouse anytime from anywhere</p> <p>4. Promotion of access to under-represented groups</p> <p>5. Provide special support programmes to students with only one "A" Level.</p> <p>6. Establishment of an Open Learning University and a Language Institute for Mauritius</p>
		Number of foreign institutions set up in Mauritius	Establishment of brand name overseas institutions or their affiliates/centres/ branches in Mauritius
		Number of foreign institutions of world repute invited to set up in Mauritius	Revisit the incentives package for attracting investment in educational services

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	1.2 Develop policy for RPEL	Policy to be in place by 2010	Develop policy paper on Recognition of Prior Learning Framework
		Student portfolio in RPEL to be operational by 2010	All TEIs to fix target on no. of non-traditional students to be recruited through RPL
	1.3 Promote e-learning and OER	Online Learner support system to in place by 2010  Linkages/MoUs to be established as from 2009	
	1.4 Develop credit accumulation and transfer system	Overall Credit transfer framework to be designed and implemented by 2010	Development of Credit Transfer Framework
<b>2. Enhancing Quality And Relevance</b>	2.1 To review the quality assurance framework in line with international practice	At least once a year	1. Undertake periodic academic audits for assessing the quality of education provided in the TEIs  2. Set up QA mechanisms for ensuring international comparability of the quality tertiary education

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>3. Critically assess the QA framework and improve to bring it in line with international standard</p> <p>4. Monitor framework on an on-going basis</p> <p>5. Monitor Quality Assurance framework for private/overseas supported Tertiary Institutions</p> <p>6. Promotion of outreach programmes anchored in community welfare and other activities geared towards social service to build nationhood</p>
	2.2 To provide an educated, versatile and innovative human resource base for the country	Number of graduates employed within one year from graduation in relevant fields (Tracer Studies) - 100%	Conduct of Tracer Studies

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.3 Encourage institutions to mount programmes relevant to the need of learners, the country and the region	Number of new programmes introduced/modified relevant to emerging sectors - 3% p.a	1. Regular Updating of the List of Indicative Priority Fields of Study 2. Setting up of a Programme Planning Committee to review existing programmes and updating curricula
	2.4 Promoting Science and Technology (including Information Technology) Education	Incorporating latest development in S & T in the curriculum	Number of new curricular items pertaining to latest development in Science and Technology introduced
	2.5 Upgrading of laboratory facilities	1.5% of laboratory items to be updated/renewed on a yearly basis	Develop plans for upgrading of labs
	2.6 Linkages and networking with Centres of Excellence in S & T	Number of MOUs/Linkages established	Inventory of existing and plan for proposed links
<b>3.Ensuring Financial Sustainability</b>	3.1 Reviewing the tuition policy in TEIs	Introduction of cost sharing mechanisms in the sector	Develop a system of flexible bursaries to ensure equity and a level playing field.
	3.2 Exploring alternative sources of funding for Higher Education	Number students sponsored by private sector	Invite private sector to contribute in the financing of tertiary education

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
		Number of PPP projects implemented	Encourage proposals for PPP projects
	3.3 Ensuring an effective and efficient financial management and accountability system for the use of public funds	Introduction of performance management systems in the sector by 2009	Guide all TEIs to put in place performance management system
		Introduction of PBB in the sector by 2009	Prepare TEIs for PBB
		Monitor unit cost in the sector	Develop and agree on methodology for calculating unit cost
	3.4 Establishment of a national student loan scheme	The loan scheme to be operational by 2008	Design the loan scheme and implementation modalities
	3.5 Reviewing state funding	Scholarships provided on merit and equity grounds	Develop new criteria for award of scholarships on grounds of merit and equity
	3.6 Introduce scholarship scheme for students from TVET to access undergraduate programmes	Introduction of 10 new of scholarships for TVET (IVTB & TSMTF) in undergraduate fields relevant to professional and vocational development	Work out modalities and identify areas for the scholarship scheme

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
<b>4 .Strengthening Sector Capability</b>	4.1 Review staff recruitment policy at all levels	Increase number of contract employees	Provide guidelines to TEIs to recruit staff on contractual instead of permanent basis
	4.2 Develop and implement schemes for optimum use of resources	Sharing of infrastructure facilities	<p>1. All TEIs to make an inventory of space and physical infrastructure and their utilisation rate</p> <p>2. Set benchmark for optimal use of facilities</p> <p>3. Invite TEIs to put in place appropriate monitoring mechanisms for optimal resource utilisation</p> <p>4. All TEIs to set up committee to closely follow-up on infrastructural projects</p>
		Facilitate PPP and introduction of formula based funding by 2009	Workshop to familiarise staff with PBB and formula based funding
	4.3 Promoting staff development at all levels including increase ratio of academic staff with higher degrees and PhDs	Earmarking 2% of the budget for staff development	All TEIs to produce their Staff Development Plans

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	4.4 Setting up of a new Campus for University of Technology Mauritius	New Campus to be set up by 2010	Plan for new UTM Campus
	4.5 Setting up of Centres of Excellence and Incubators	Emergence of 2 Centres of Excellence (Fashion, Tourism & Finance) by 2010	Develop mechanisms for establishing the CoEs and follow-up on their development
<b>5.Meeting Students' Needs</b>	5.1 Promoting an environment conducive to quality learning	Improving the Pedagogical & Technological Support conducive to Teaching & Learning e.g Introduction of laptops & projectors, data logging units in science laboratories.	1. Inventory of resources for teaching, learning and research, including ICT resources and utilisation rates for programme delivery in TEIs  2. TEIs to produce their plans for improvement of teaching, learning and research environment and greater integration of ICT in the teaching and learning process
	5.2 Improving extracurricular infrastructure facilities to provide for an appropriate campus experience	Increasing the number of wi-fi spots, sports rooms etc.	

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	5.3 Setting up of halls of residence	Hall residence of capacity 250 set up by 2010	TEIs to come up with plans for residential campus
	5.4 Provision of world class resource centres	On-line access to libraries by 2010  TEIs to set up multimedia resource centres by 2010	Design project for on-line access to all TEIs' libraries
	5.5 Providing work based experience	ongoing	All TEIs to come up with calendar for placement and modalities developed
<b>6. Facilitating Research For National Development</b>	6.1 Development of list of priority for research in line with national requirements	Priority research list in higher education established 2010	Draw up List of Priority Areas for research
	6.2 Formulate a strategy to support research and innovation initiatives	Increase in number of consultancy projects  Increase number of MPhil/PhD students by 5% p.a	1.Strategy Papers from TEIs to foster research and innovation initiatives  2.Facilitate enrolment of MPhil/PhD students
	6.3 Encourage consultancies and commercial spin-offs from research	Increase in Funds generated through consultancy projects and spin-offs from research	Create database of past and on-going research

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	6.4 Promote collaborative research	Increase in number of co-authored research projects undertaken	Set up an inter-institutional committee to develop an action plan for collaborative research
<b>7.Enhancing Linkages Between Tertiary Education Institutions And The Economic Sectors</b>	7.1 Setting up of faculty and industry advisory boards	All programmes to be designed with the assistance of industry/SMEs by 2010	All TEIs to set up mechanisms for industry/SMEs participation in programme and curriculum designs
	7.2 Compulsory work placement for full time students	All F/T students to undergo work placement by 2010	All TEIs to come up with calendar for placement and modalities developed
	7.3 Fostering Community outreach programmes	Each faculty in each TEIs to establish at least two Community Outreach Programmes during the year by 2010	All TEIs to come up with calendar for Community Outreach Programmes
	7.4 Using Corporate Social Responsibility for promoting tertiary education	Encourage participation of private sector in Tertiary Education through their CSR (2 to 3 initiatives per year by 2010)	Create database of initiatives taken by private sector in tertiary education

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
<b>8.Creating An Effective National Knowledge And Innovation System</b>	8.1 Establish a framework for the national knowledge and innovation system	Framework in place by 2010	Developing framework
	8.2 Strengthen the productive capacity of the national knowledge and innovation system		Create a knowledge and innovation fund for conducting research activities by 2009
	8.3 Strengthen effective demand for knowledge and innovation		Systematise the identification of knowledge gaps that inhibit productivity especially in key growth sectors by 2011 and enhance productivity in key sectors.
<b>9.Internationalization Of Mauritian Tertiary Education</b>	9.1 Create an enabling environment for Mauritius to emerge as a Regional Knowledge Hub and a Centre for Higher Learning and Excellence	2008 onwards	<ol style="list-style-type: none"> <li>1. Promote, Create and Develop Regional Centres of Excellence</li> <li>2. Marketing and promoting Mauritius as a Knowledge Hub</li> <li>3. Support for attracting investment in educational services</li> <li>4. Promote strategic alliances</li> </ol>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	9.2 Foster regional and international understanding and cooperation through a diversity of studentship and overseas institutions		<ol style="list-style-type: none"> <li>1. Assist institutions to develop student and staff exchange programmes</li> <li>2. Support institutions in organizing regular academic events</li> <li>3. Foster participation of local institutions in regional and international events</li> </ol>
	9.3 Position Mauritius in the Region as a reputed Knowledge Hub and the gateway for post-secondary education		<ol style="list-style-type: none"> <li>1. Encourage institutions to mount programmes that are relevant to the needs of learners, the country and the region</li> <li>2. Benchmarking TEC with its counterparts internationally</li> <li>3. Develop further its linkages with other peer institutions</li> </ol>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	9.4 Export of Educational Services	<p>Number of foreign students enrolled in local institutions - 10% increase p.a</p> <p>Income generated from export of educational services</p>	<p>1. Assist institutions in their marketing campaigns</p> <p>2. Facilitate export of educational services through appropriate frameworks and incentives</p>

### **3.7. HUMAN RESOURCE DEVELOPMENT SUBSECTOR--SHAPING THE FUTURE THROUGH LIFE-LONG LEARNING AND “HUMANPOWERMENT” OF MAURITIUS**

As Mauritius moves to higher stages of development through economic diversification, the skills and competencies required will be different. Therefore the challenges of human resource development and lifelong learning should be taken with renewed energy to ensure sufficient number of skilled, competent and versatile labour ready to offer quality services/products and to face the challenges of the global economy confidently.

#### **Human Capacity Building for the New Economy**

The emergence of the New Economy often referred to as the Knowledge Economy or the Information Society is bringing about dramatic changes to which Mauritius will have to adapt. The hypercompetitive global knowledge economy is also transforming the demands of the labour market throughout the world. The new economy calls for a human resource development system that is attuned to the needs of firms, sufficiently flexible to adapt to changing demands, and encourages lifelong learning. A regularity that has emerged in numerous empirical studies is that the more educated and skilled the people, the better they are able to adapt to changes. Therefore, for every citizen to be empowered to function in the modern society will require a new model of education and training, a model of lifelong learning that encompasses learning throughout the lifecycle, from early childhood through to retirement. The model will play a pivotal role in preparing every citizen to compete in the global economy. Thus Mauritius has no choice but to take up Human Resource Development through lifelong learning with renewed energy.

#### **3.7.1. Situational Analysis**

In Mauritius while the Ministry of Education & HR, through several parastatal organisations including the Human Resource Development Council (HRDC) is responsible for education and training in all sections and at all levels, it is the Ministry of Labour and Industrial Relations that is responsible for Employment Services and the management of Employment Information Centres.

#### **Employment and Unemployment trends**

In the first quarter of 2008, the number of Mauritians in employment was 508,200, the number of unemployed was 45,600, and the unemployment rate was 8.2%. The unemployment rate for the year 2008 is estimated at 8.0%. The 45,600 unemployed comprised 17,900 males (39%) and 27,700 females (61%). 22% of the unemployed had not reached the CPE level, and a further 41% did not possess the SC. The proportion with SC as highest educational attainment was 22% and that with Higher School Certificate (HSC) 10%. The number of unemployed having studied up to the tertiary level represented about 5%. Between the periods 1992 to 2007 unemployment has remained below 10%.

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### **Employment by industrial sector**

During the first quarter of 2008, the primary sector comprising Agriculture, and Mining & Quarrying, provided jobs to about 8% of the working population. The secondary sector, which includes Manufacturing, Electricity & Water and Construction, employed another 33%, and the tertiary sector, which covers trade, hotels & restaurants, transport and all the other service industries, the remaining 59%.

### **The National Human Resource Development Plan (NHRDP)**

In order to ensure that the investment in human resource development benefits to the largest number of citizens there is a need for a proper planning. In this context, the National Human Resource Development Plan (April 2007) was prepared by the Human Resource Development Council (HRDC). The NHRDP is defined as a policy framework for education, training programmes and career progression to meet the country's skills and competence needs. The core objectives of the NHRDP are to (a) estimate the demand for manpower in key sectors in terms of different skills/knowledge; (b) decrease the mismatch between the demand for and supply of manpower, and (c) develop proactive human resource development policies.

The plan gives an idea of the likely employment opportunities that will be generated in the economy between 2007-2010 by sectors (Agriculture, Financial Services, Information & Communications Technology, Manufacturing, Tourism, Education, Seafood Hub, Rodrigues, and Public Service) by occupations and by educational skill categories. It provides a basis for training and educational planning, counseling and guidance. The NHRDP is being updated and a second version will be launched in 2008.

### **The National Qualifications Framework (NQF)**

Life-long learning can be pursued provided it is carried out within a well-established framework. With a view to rationalising qualifications and providing for pathways and recognition, the MQA has set up a 10-level National Qualifications Framework (NQF) as shown in Figure 30.

This framework promotes lifelong learning, making it easier for people to move between different education system and training institution. The Mauritian Framework encompasses the general education, the vocational and technical training and higher education. It applies to all type of qualifications from those achieved at the end of the primary school to those obtained at highest academic and professional level.

In order to develop a national approach to Recognition of Prior Learning (RPL) and to validate and recognize experiential learning, the Mauritius Qualifications Authority (MQA) has developed a policy that encompasses an institutional framework for validation.

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Figure 30: The Structure of the National Qualifications Framework

	PRIMARY / SECONDARY EDUCATION	TVET / WORKPLACE	TERTIARY EDUCATION	LEVEL
10			Doctorate	10
9			Masters Degrees eg MA, MSc, M.Phil Postgraduate Certificates, Postgraduate Diplomas	9
8			Bachelor with Honours, Conversion Programmes	8
7			Bachelor (ord. Degree)	7
6		Diploma	Diploma	6
5	HSC / GCE 'A' Level /BAC / IBAC		Certificate	5
4		Certificate		4
3	SC / GCE 'O' Level			3
2				2
1			Certificate of Primary Education	1

### The National Training Fund (NTF)

The training levy grant scheme has been in operation since 1989. Under this scheme, a training levy equivalent to 1% of the basic wage bill is imposed on all employers in the private sector, except for charitable institutions and employers employing household workers.

The NTF which has been in operation over the past 18 years has generated levy money out of which grants have been paid to employers. The scheme has paid out a total amount of nearly Rs1billion to employers as training incentives over the past 18 years. It has facilitated direct training of around 340,000 persons in the private sector over the past 18 years.

### Government Empowerment Programme

The Government Empowerment Programme was launched in 2006 with the aim to set the foundations of a modern Mauritius where everyone participates in the economic development. The goals of the project are to:

- Secure viable employment for currently unemployed and those who lose their jobs due to industry restructuring.
- Encourage entrepreneurship and improve the capacity and competitiveness of small entrepreneurs, especially in the global market.
- Provide transitional support to low-income and vulnerable households for housing.
- Enhancing education of the children in the most vulnerable households.

### Providers of education and training

Together with publicly-funded institutions (schools, universities, IVTB, etc.), there are around 350 MQA registered institutions that provide training which also include private and in-house training institutions

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that contribute continuously to human resource development. Amendments to legislations have made affiliation to foreign educational and training providers possible.

### **Shaping the future**

The success of the Mauritian economy hitherto achieved has been largely based on knowledge. In fact, knowledge is considered as the most important factor for re-igniting the engine of growth. It does not only increase competitiveness but it also enhances social and political welfare. However, this also poses new challenges.

- **A Multi-skilled Workforce for the New Economy**

Globalisation of trade, finance, and information flows is accelerating the movement of Mauritius towards a service-based industry which requires our citizens to be skilled. There is an urgent need to ensure that people who lack the right education are not excluded. Technical change and organizational change are widening the wage gaps between skilled and unskilled workers. The pain of exclusion will be felt even more strongly if access to education, training and IT is inadequate. To reduce the risk of exclusion there is a need to improve access to life-long learning including quality training and job-placement throughout the lifetime of every citizen. This also calls for labour market reforms that will permit people to use their skills in an increasingly flexible way.

- **Ensuring Success in the Competition for Capital Investment**

In the absence of natural resources, our country has to attract capital investment. In the global, competitive economy, capital investment follows human resource capacity. Singapore, for example, developed its highly skilled workforce within the context of a strategy to attract foreign direct investment (FDI) in high-technology industries. The present strategy should go a long way towards ensuring that the inflow of FDI and the existing businesses are not hampered due to the unavailability of an adequate pool of qualified and skilled people. No effort should be spared in ensuring continuous empowerment and proper professional orientation of each and every citizen at all stages of their career path through relevant and up-to-date educational and training programmes.

- **Quality Products and Services**

Education and training must connect citizens to the world economy through enhanced access to technology, knowledge, computer literacy and life-long learning. It should build skills and values: an understanding of competitiveness, rooted in local culture and the environment. To sustain its development, Mauritius must be able to offer quality goods and services to the world. In traditional industries most jobs require employees to learn how to perform routine functions, which, for the most part, remain constant over time, while in the knowledge economy, change is so rapid that workers constantly need to acquire new skills. Firms can no longer rely solely on new graduates or new labour market entrants as the primary source of new skills and knowledge. Instead, they need workers who are willing and able to update their skills throughout their lifetimes. Through the present strategic plan,

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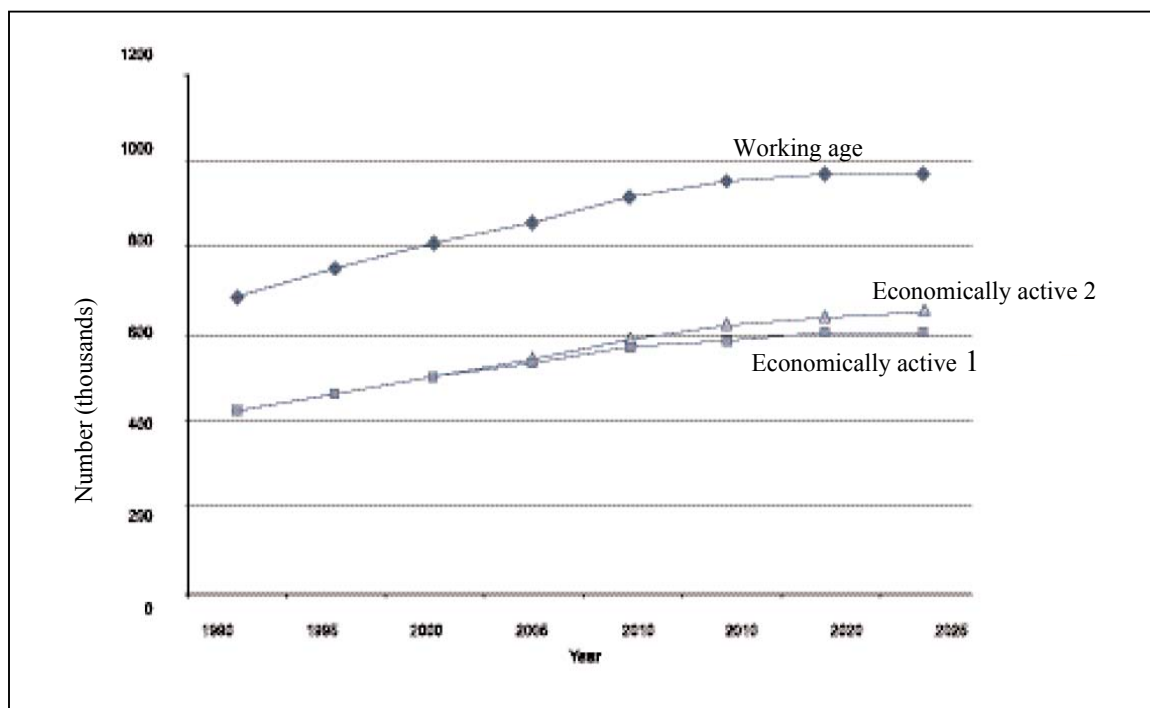
Mauritius aims at responding to these needs by creating education, training and human resource development systems that equip people with the appropriate skills. In this venture, the private sector has to play an ever increasing role through the consolidation of the National Training Fund (NTF) and further investment in the empowerment of their employees, and greater participation in the Government Empowerment Programme.

Greater skills also facilitate worker mobility across occupations and industries in response to new opportunities, and help people reallocate resources, both human and physical, towards more productive opportunities, and even to realise that those opportunities exist. However, we should mitigate the risk of brain drain as the position that knowledge now occupies—as a key source of comparative advantage—has been speeding up the movement of skilled people to places where they can most easily turn knowledge into wealth.

- **Projections of the labour force**

In the ILO International Migration Paper 71 (ILO, 2004), projections for labour force and employment have been estimated up to the year 2025. The labour force projection has been calculated for two categories of population: economically active 1 and economically active 2. Figure 31 depicts the projected working age population and labour force (1990-2025).

**Figure 31: Projected working age population and labour force, (1990-2025)**



Source: ILO International Migration Paper 71 (ILO, 2004)

The “economically active 1” estimate was calculated by applying the present participation rates for men and women to the UN data on population of working age (15-64 years). They show that the labour force

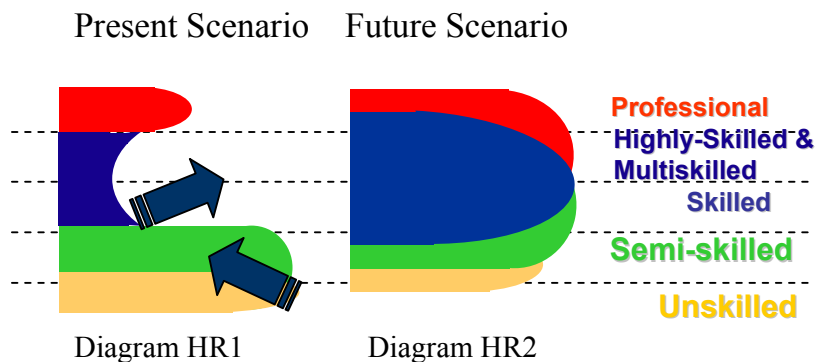
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would be 568 000 in 2010, 598 000 in 2020 while by 2025 it is expected to be 596 000. “Economically active 2” trend assumes an increase in the female activity rate of 2 percent per 5-year period ultimately resulting to a rate of 51 percent by 2025. This category seems to be a more realistic predictor. Past increases in employment – related to the EPZ – involved an increase in women’s participation. Similarly, a greater desire and ability on their part to contribute to the future proposed expansion into ICT and the Knowledge Economy is likely. Among potential Highly Skilled Persons (HSPs), the female spouses of Mauritians may constitute a positive resource. Consequently, under the “economically active 2” scenario, the Mauritius labour force is expected to increase from 531 300 in 2003 to 586 000 in 2010, reaching 644 000 in 2025. In the absence of data on projected or desired growth rates and in employment patterns, the ILO International Migration Paper 71 (ILO, 2004) has worked on three different scenarios to calculate future employment (**Annex HR**).

- **Trends in the skills and competencies required**

The present scenario as shown below in Diagram HR1, demonstrates that we are perpetuating at the lower levels since our labour force consists of a majority of semi-skilled and unskilled employees with just a few professionals and highly skilled persons. One of the aims of the present strategic plan is to ensure that the desired scenario would be represented by Diagram HR2.

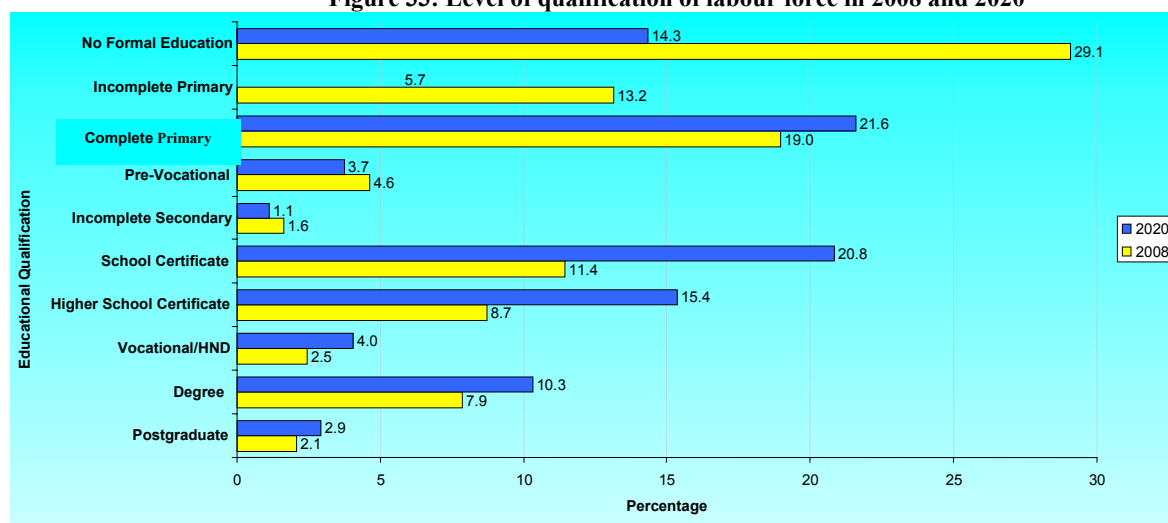
**Figure 32: Trends in skills and competencies**



Based on the current trends, Figures 33 and 34 show that more qualified employees would be required in the various sectors of the Mauritian economy by year 2020.

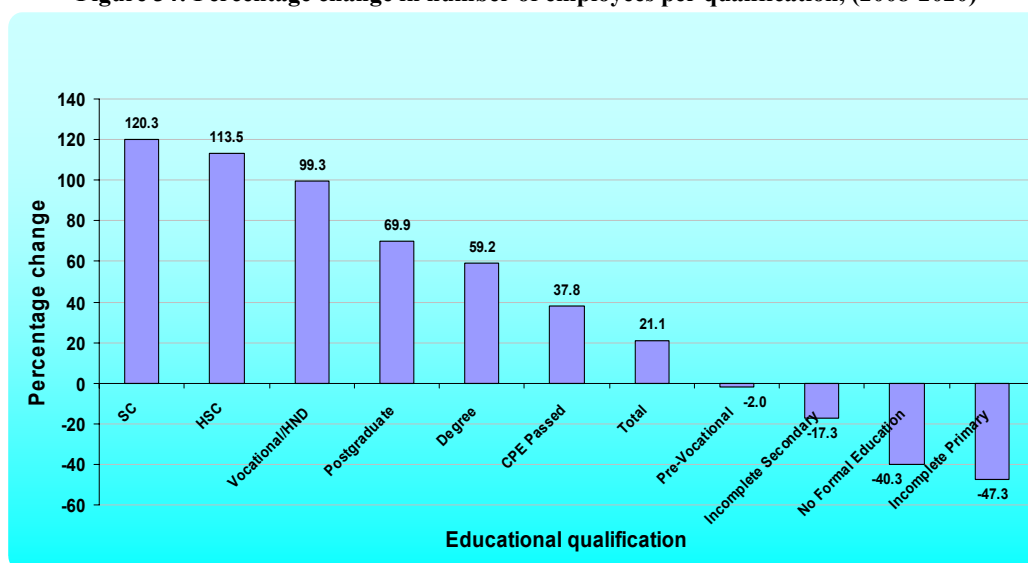
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**Figure 33: Level of qualification of labour force in 2008 and 2020**



Figures 33 and 34 have been calculated based on current strategies. However innovations in policies are expected to change the state of affairs.

**Figure 34: Percentage change in number of employees per qualification, (2008-2020)**



The percentage increase in number of employees holding a post-graduate qualification would be 70% as compared to those holding a first degree only. The highest increase would be among those having a secondary school (SC: 120%, HSC: 114%) and vocational (99%) qualification.

Figure 34 depicts that a decrease in employment among those possessing no formal education (-40%) and low level qualifications namely incomplete primary (-47%) and secondary (-17%).

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The labour market being very dynamic and with a view to having up-to-date information on the labour market requirements, a revised version of the NHRDP will be launched in 2008.

- **Projected employment growth sectorwise**

In the NHRDP, projections were made for the number of employees which will be required by all the 8 main sectors of the economy by 2010 as shown in Table 2. The first conclusion which was reached was that the number of employees in these sectors would increase by 6 percent.

In the Knowledge Hub and the EPZ sector, a slight increase of 2 and 3 percent respectively, in the number of employees would be expected. As in the year 2007, the Manufacturing sector would have the biggest share of employment in 2010. With the exception of the Agricultural sector, all sectors would witness a rise in the number of employees. The highest percentage increase of 48 percent would be experienced in the Seafood sector. This percentage increase can be explained by new developments in the Seafood sector and redeployment of employees from the Agricultural sector to Seafood sector. Three of the emerging sectors, ICT, Tourism and the Financial sector would experience an increase in the number of employees in the range of 12-17 percent.

Table 2: Estimated number of employees in various sectors from 2007/2010

	as at June 07	2007-08	2008-09	2009-10
<b>Agriculture</b>	16.1	13.8	13.5	12.8
<b>Finance</b>	3.2	3.2	3.3	3.4
<b>ICT</b>	3.5	3.5	3.7	3.8
<b>Manufacturing*</b>	35.5	37.1	37.1	37.2
<b>EPZ</b>	20.2	20.4	19.8	19.5
<b>Tourism</b>	12.3	12.6	13.0	13.5
<b>Knowledge Hub</b>	6.7	6.5	6.5	6.4
<b>Seafood**</b>	2.5	2.7	3.0	3.4

*\*This excludes employment to be generated by Tianli Group which is estimated to be around 10 000 in the coming years*

*\*\*This excludes employment to be generated by Land-based Oceanic Industry which is expected to be around 10 000 in the coming years*

Source: 2<sup>nd</sup> Edition, NHRDP 2007-2010

### 3.7.2. Overall Goal

To build a creative and competent Human Resource base for Mauritius through human resource development and lifelong learning.

### 3.7.3. Critical Challenges

1. Promote human resource development in line with national economic and social objectives.
2. Stimulate a culture of training and lifelong learning at the individual, organisational and national levels for employability and increasing productivity; and
3. Provide the necessary human resource thrust for successful transformation of the economy of the country into a Knowledge Economy.

### 3.7.4. Strategic Goals

1. Transform Mauritius into a Knowledge Economy
2. Build a world class human resource base
3. Develop and implement a lifelong learning policy
4. Foster Research & Development for effective HRD
5. Provide professional orientation to prospective entrants in the labour market

### 3.7.5. Summary of Strategic Activities

In light of the main objectives and challenges above, the Government's strategy during the period 2008-2020 will be to create an enabling environment for Mauritius to emerge as a knowledge economy. In line with this strategy, policies for human resource development will aim at:

#### **Transform Mauritius into a Knowledge Economy**

The rapid developments of ICT and transformation to a knowledge-based economy have created robust demand for workers highly skilled in the development and use of ICT. A well-trained workforce is essential to the efficient acquisition, utilisation, creation and dissemination of relevant knowledge and skills that tend to increase productivity and economic growth. Since education is a fundamental key to wealth creation and competitiveness in the global knowledge economy, our education and training providers will play a pivotal role in supporting all members of our society to adjust to the new environment and thereby contribute to the development of a vibrant knowledge-based economy.

This objective aims at transforming Mauritius into a knowledge economy by

- promoting the Knowledge-based Economy
- creating opportunities to outreach for excellence
- ensuring that Mauritians have a definite competitive advantage to face the challenges of the global economy

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- developing a 24/7 Economic model and work culture

All firms should be encouraged to intensify their knowledge-based activities and to innovate.

Sensitisation of the Labour force, Employers, Authorities and the population at large about the advantages of adopting a 24/7 economy and changing working culture is also essential. The project will therefore help to establish a national wave of consciousness in the Mauritian labour force and the population at large which will help provide the necessary enabling environment to institutionalise it. The campaign will ensure that people are willingly and are readily available to take up jobs that require working outside the traditional working hours.

### **Build a world class human resource base**

This objective provides for the development of a targeted approach for training incentives and will help to promote a national training culture and ensure more effective training by

- Promoting a training culture, lifelong learning and employability
- Facilitating access to high quality training facilities
- Creating a robust HRD value chain ( Education-Training-Employment);
- Enhancing quality of labour force for promoting business activities

Business organisations should not suffer from a lack of competent workforce. Therefore it should be ensured that there is.

- Availability of a pool of multi-skilled, flexible and qualified manpower and training providers
- Reduction in the number of unemployed persons to a minimum

It also aims at meeting the aspirations of the unemployed, redundant workers and younger generation in terms of skills requirement. It will assist organisations to be aware of the precise skills and training requirements of the unemployed, the redundant workers and the aspirations of the younger generation so that the right type of training can be formulated and encouraged. Activities will involve the commissioning/conducting of surveys which will be used for the preparation of HRD policies to

- Meet the aspirations of the unemployed and redundant in terms of skills requirements
- Promote employability skills including Functional Literacy, numeracy and ICT in the workforce
- Provide quality training

Promoting the right Attitude Training and Basic Core Skills including Literacy and Numeracy is vital and will involve, amongst others, various activities including national campaigns on desired attitudes, the review of existing curricula and the development of relevant training programs, including a Code of Ethics and the establishment of a bank of training modules.

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### **Develop and implement a lifelong learning policy**

To participate in the emerging knowledge economy, people need to update their skills continuously. Lifelong learning will thus become a norm. Providing lifelong learning entails securing affordable access to a variety of learning opportunities, both formal and non-formal. This means that the learning system and its governance must change and that more resources will have to be allocated. Given limited public resources, relying on cost-sharing, involving private providers, and increasing the efficiency of the education system are critical. Operating successfully in the knowledge economy requires mastery of a set of knowledge and competencies. In this competitive global knowledge economy, we have to prepare our education and training system to support the acquisition and application of knowledge.

This objective will thus have the responsibility of 'moulding' Mauritians to become lifelong learners. Since learning is seen as a continuum covering the individual's whole life span, all forms of learning and all learning environments enabling learning should be included to ensure that lifelong learning is an integral part of human resource development. Therefore a strategy on lifelong learning ready by 2010 should be crafted with in mind self-development. A record on the number of persons following courses for self-development should also be maintained.

### **Foster Research & Development for effective HRD**

The world is undergoing a new industrial revolution – 'the Knowledge Revolution' – fuelled by the pace of technological change. Research and development (R&D) is at the heart of progress and to increasing productivity, exploiting growth opportunities in emerging markets and creating knowledge-driven competitive advantage.

This will involve the conduct of Sectoral Training Needs Analysis (TNA) and the formulation of the National HRD Plan where the following should be carried out which should be an invaluable planning and policy resource:

- Development of list of priority for research in line with national requirements
- Formulation of a strategy to support research and innovation initiatives
- Updating of the National Human Resource Development Plan (NHRDP)

### **Provide professional orientation to prospective entrants in the labour market**

This will help to cluster the different Sectoral HR requirements and will make the Labour Market Information System (LMIS) more effective. The system will be essential for tracking and analyzing our economy. It can also be used in determining future workforce training needs, identifying the availability of labour, ascertaining the prevailing wage rates, and exploring potential markets. The Government needs labour market information to reduce unemployment, generate employment, or plan training programmes to meet the needs of industry. Labour market studies are also valuable to industries and businesses seeking ways of attracting and retaining skilled workers, or assessing the scope and size of potential markets.

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It will equally provide a better professional orientation and counselling service to current and future job seekers to warrant a quality professional orientation and counselling service. This can be made possible by the publication of an integrated, interactive and dynamic website on labour market, demand and supply and skills.

There should be measures to promote synergy among stakeholders and institutions towards effective career guidance and counselling service. Collection of information from stakeholders through labour market surveys and analysing the changing trends in the labour market, labour shortages, and foreign labour is determining. The objective should also ensure that every Mauritian has a well articulated career plan.

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### 3.7.6. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
<b>1.Transform Mauritius into a Knowledge Economy</b>	1.1 Promote the Knowledge Economy	Double the number of Knowledge Organisations per year  Best "Knowledge Organisations" Award annually	1.Promote knowledge management  2.Organise workshops/Information sessions on Knowledge Economy on Sectoral basis (At least 1 workshop annually per sector)  3.Support development of existing Organisations into "Knowledge Organisations"  4.Reward high performing "Knowledge Organisations" through annual Awards
	1.2 Create opportunities to outreach for excellence	Excellence awards for each sector  Double number of organisations offering innovative services/products by 2015	1.Campaign for HRD Excellence Awards  2.Provide incentives for innovations  3.Encourage utilisation of high performance work practices at level of industry and Ministries/Govt. Departments  4.List of high performance work practices
	1.3 Ensure that the Mauritian has a definite advantage to face the challenges of the global economy	The number of Mauritians able to use state of the art technology effectively and efficiently increases	Encourage leading organisations to import training in Mauritius through appropriate networking and MoUs
	1.4 Develop the 24/7 economic model and work culture	Publication of a plan to conduct the campaign by beginning 2009	1. Launching National Sensitisation Campaign to change work attitude in the context of a 24/7 Economy.

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
		75% of the labour force, employers and most of the public at large sensitised adopt and adapt the 24/7 culture by 2015 and 100% by 2020	<p>2.Renew the National Sensitisation Campaign at regular intervals</p> <p>3.Create enabling environment for the 24/7 model</p>
<b>2. Build a world class human resource base</b>	2.1 Promote a training culture, lifelong learning and employability	35% of the labour force to follow at least one session of relevant training annually by 2010, 65% by 2015 and 100% by 2020	<p>1.Review training incentives for employers, training institutions and for self-development</p> <p>2.Inventory list of required skills</p> <p>3. Develop indicative list of skills required in line with national requirements so as to avoid the mismatch between demand and supply.</p>
		Minimum hours of required training at different levels defined.	<p>1. Establish national norms for Training/lifelong learning facilities (for e.g. Minimum number of yearly hours to be allocated to training for each employee).</p> <p>2.Initiate training programmes for socially marginalised groups and drop outs</p> <p>3.Short training programmes in identified areas for 1,000 persons</p>
	2.2 Facilitate access to high quality training facilities	50% of training programmes being offered are directly linked to the needs of the labour market by 2010, 75% by 2015 and 100% by 2020	<p>1.Inventory list of training programmes available</p> <p>2.Establish set of criteria to assess relevance of training programmes being delivered</p> <p>3.Provide incentives to registered training providers to offer relevant courses</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.3 Create a robust HRD value chain (Education- Training- Employment)	Effective HRD value chain by 2020  Network for institutional interface 2020	1.Work out a plan for articulation of value chain to reduce mismatch  2.Encourage establishment of Institutional synergy
	2.4 Availability of pool of multi-skilled and qualified manpower and training providers	Availability of skilled and qualified labour force for businesses is ensured. 75% of business can find skilled and qualified labour force by 2010 and 100% by 2015	1.Prepare compendium of training programmes locally or regionally  2.One-stop shop for HRD services (e.g. interactive website to provide the employers and the public at large with up-to-date information on labour market)  3.Establish a well-defined database of human resources
	2.5 Meet the aspirations of the unemployed and redundant in terms of skills requirements	Unemployment rate is 7.5% by 2010, 5% by 2015 and 3% by 2020  Formulate HRD policies on basis of findings	1.Inventory of aspirations, attitude and suggestions from unemployed and redundant at all levels, for age groups and youngsters  2.Initiate and promote training for unemployed and retrenched workers to take up jobs  3.Commission/conduct survey among the unemployed and redundant  4.Prioritise the list and develop the Action Plan for their implementation Commission/conduct survey on aspirations of the youngsters

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.6 Promote employability skills including Functional Literacy, numeracy and ICT in the workforce	Functional numeracy, literacy is at 100% of the labour force by 2015 and ICT 50% by 2015 and 80% by 2020.	<p>1.Core Module on Functional Literacy, Numeracy and ICT</p> <p>2.Inclusion of a specific Module on Functional Numeracy/Literacy in training programmes wherever required</p> <p>3.Encourage regular review of existing curricula at level of TVET institutions including in-house training centres</p> <p>4.Encourage positive attitude, ethics, and citizenship</p> <p>5.Develop a basic Functional Numeracy/Literacy training module</p> <p>6. Encourage NGOs to run Functional Numeracy, Literacy courses in different regions of the country with the help of resource persons.</p> <p>7.Use audiovisual facilities to promote such Functional Numeracy &amp; Literacy Training Programmes</p>
	2.7 Promote training in entrepreneurship and development of entrepreneurial attitude and culture	<p>National strategy for entrepreneurship by 2010</p> <p>40% of the labour force has followed a basic course in entrepreneurship by 2015 and 75% by 2020</p>	<p>1.Launch a national sensitisation campaign on entrepreneurship</p> <p>2.Develop new training programmes for entrepreneurship</p> <p>3. Finalise list of training programmes and pilot implementation.</p> <p>4.Benchmarking at enterprise and national levels</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	2.8 Promote attitude Training at all levels	Each organisation to have a code of Ethics and good HRD Governance by 2015	1.National campaign on desired attitudes and core skills  2.Survey on national consciousness on positive attitudes  3.Development of code of ethics
	2.9 Ensure positive Impact of Training	75% of the desired training has an impact on performance of employees by 2015 and 100% by 2020.	Develop methodology and measures for evaluation of impact of training
	2.10 Establishment of a bank of training modules	Bank of training modules for the 5 key sectors of the economy by 2015 and the remaining by 2020.	1.Establish a list of training modules required by stakeholders in the different key sectors of the economy  2.Outsource development/purchase training modules
<b>3. Develop and implement a lifelong learning policy</b>	3.1 To ensure that lifelong learning is an integral part of human resource development	Strategy on lifelong learning ready by 2010	1.Document best International practices in lifelong learning  2.Create flexible policy and regulatory frameworks for effective lifelong learning systems  3.Establish quality assurance mechanisms, and national benchmarks for measuring lifelong learning outcomes  4.Set up a coordinating mechanism for lifelong learning  5.Incorporate a credit accumulation system within the NQF to support lifelong learning

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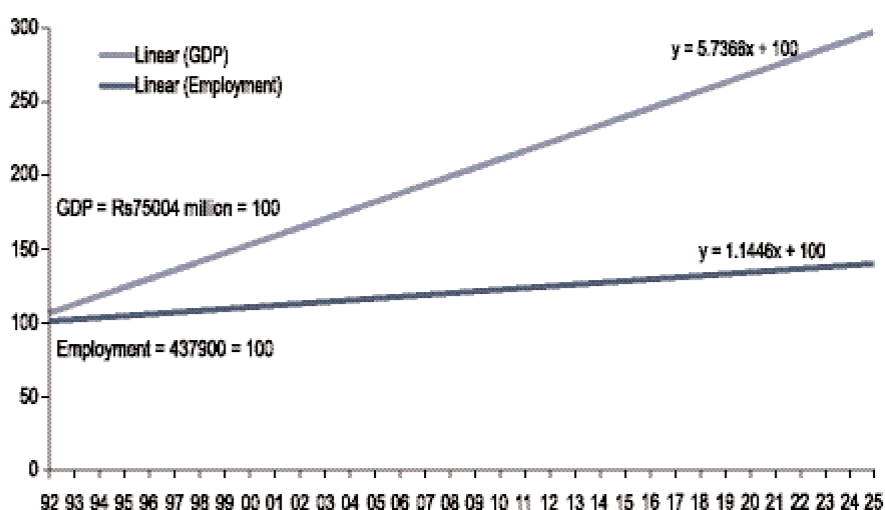
STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>6.Integrate flexible learning in training delivery</p> <p>7.Promote alternative mode of learning: workplace, open and distance learning</p> <p>Encourage continuous self-development</p>
	Encourage self-development	No of persons following courses for self-development increases	<p>1.Develop incentives for self-development</p> <p>2.Draw up a compendium of educational and training facilities</p>
<b>4. Foster Research &amp; Development for effective HRD</b>	4.1 Development of list of priority for research in line with national requirements	Quality research in HRD initiated	Draw up List of Priority Areas for research in HRD
	4.2 Formulate a strategy to support research and innovation initiatives	The number of consultancy projects in HRD doubled by 2015	Provide sufficient support and enabling environment to encourage Mauritian firms to engage in consultancy
<b>5. Provide professional orientation to prospective entrants in the labour market</b>	5.1 Quality professional orientation, guidance and counselling service	<p>Publication of an integrated, interactive and dynamic website on labour market, demand and supply and skills in place by 2015, the integrated labour market information system (ILMIS) ready by 2015</p> <p>Every Mauritian has a well articulated career plan by 2015</p>	<p>1.Promote synergy among stakeholders and institutions towards an effective career guidance and counselling service</p> <p>2.Collection of information from stakeholders through labour market surveys</p> <p>3.Analysis of the changing trends in the labour market, labour shortages, and foreign labour</p> <p>4.Publish information</p>

## ANNEX HR

### (a) Scenario 1 (continuation of past trends)

Scenario 1 is a linear projection made on the basis of past trends, and is presented graphically in Figure 35. Under a linear projection of GDP and output per worker, employment would reach 528 000 in 2010, 553 000 in 2015, 578 000 in 2020 and 603 000 in 2025. Assuming that the number of foreign workers is maintained at 20 000, this projection would imply a rate of unemployment of over 13 percent in 2010 and 2015, falling below 10 percent in 2020 and 2025. Without foreign workers unemployment would fall by a few percentage points (9.9 percent in 2010) but it is probable in practice that the absence of the foreign workers might decrease rather than increase employment of Mauritians. In view of the current and expected transformation of the structure of the Mauritian economy, there is no reason to believe that the future will be a mechanical linear projection of past trends. In any case this scenario is not considered desirable in view of the implied increase in unemployment.

Figure 35: GNP and Employment projections (2004-2025) based on past trends



Source: CSO for 1992-2003; GDP data reproduced

### b) Scenario 2 (desirable scenario)

Table 3 represents the overall employment picture till 2025 under this “desirable” scenario. It assumes that the unemployment rate is brought down to 5 percent, and that consequently the number of jobs needed for Mauritians would be 557 000, 586 000, 605 000 and 612 000, for 2010, 2015, 2020 and 2025, respectively (Line C). This scenario also assumes that the number of foreign workers would stay constant at 20 000.

This scenario is based on what is “needed” or desirable, and is on the optimistic side. It assumes that, in spite of the expected decline of certain traditional activities, the economy would be able to create

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some 82 000 additional jobs by 2010 – a significant challenge – since it involves a higher level of job creation than would be the case if current linear trends (Scenario 1) were continued. This is particularly the case for the period up to 2010 when 82 000 new jobs would need to be created. After 2010, the needed rate of employment creation slows down: 29 000 between 2010 and 2015, falling down to 19 000 and 7000 in the succeeding 5-year periods. (Line F). It is, of course, not difficult to envisage other sub-scenarios.

**Table 3: Scenario 2 - Overall employment picture till 2025**

		2003	2010	2015	2020	2025
A	Mauritius labour force (estimates after 2003)	531.3	586	617	637	644
B	Unemployed Mauritians (assumed at 5% A after 2010)	54.4	29	31	32	32
C	Employment for Mauritians (A-B)	476.9	557	586	605	612
D	Foreign workers	18.2	20	20	20	20
E	Total employed (C+D) (employment needed after 2003)	495.1	577	606	625	632
F	Additional employment needed	-	82	29	19	7

*Sources: Data for 2003, CSO; For future dates, labour force estimates are based on UN Population Projections for the age group 15 to 64 applying the current participation rate for men and assuming a gradual increase in the participation rate of women (increasing from 41 per cent in 2000 to 51 percent by 2025)*

### c) Scenario 3 (bleak scenario)

A third scenario (bleak scenario) assuming high unemployment rate (15 percent), with outward migration as a palliative, is presented in Table 4.

**Table 4: Scenario 3 (bleak scenario)**

		2003*	2010	2015	2020	2025
A	Mauritius labour force	531.3	586	617	637	644
B	Unemployed Mauritians (15% of A, after 2003)	54.4	87	93	96	97
C	Employment of Mauritians – Total (A-B)	476.9	499	524	541	547
C1	(domestic)	476.9	495	506	509	514
C2	(overseas)	n.a	4	18	32	33
D	Foreign workers	18.2	5	1	1	1
E	Total Employment in Mauritius (C.1+D)	495.1	500	505	510	515

\*Actual

*Sources: Data for 2003, CSO; For future dates, labour force estimates are based on UN population projections for the age group 15-64 applying the current participation rate for men and assuming a gradual increase in the participation rate of women (increasing from 41 per cent in 2000 to 51 per cent in 2025)*

### **3.8. SYSTEM MANAGEMENT REFORM – TRANSFORMING THE MOEHR**

Implementation of the EHRSP for 2020 will require a transformation of the Ministry of Education & Human Resources (MOEHR). The new Programme Based Budgeting (PBB) system agreed by the Government demands achievement in return for investment, and it requires a system of performance measurements at all levels of the system - including the MOEHR. The mandate of the MOEHR is to focus holistically on the country's education and human resource needs. While the MOEHR has performed excellent work in managing its resources, programmes, and other initiatives, it continues to face many challenges in carrying out its responsibilities in a flexible, timely and unconstrained manner. The management and performance of the MOEHR will need to be improved through its governance, accountability and achievement structures that will co-ordinate the provision of quality educational services throughout the system.

As one of the most complex government institutions and the largest government employer, the Ministry's vision for organizational change includes increasing reliance on its own people and systems and adherence to public administration standards to achieve a sustainable ability to finance and support the delivery of improved quality education for all Mauritians. Achieving this will require strengthening of the Ministry's institutional, financial, human, physical and technological capacities.

#### **3.8.1. Overall Goal**

The overall strategic goal is to develop the Ministry of Education & Human Resources into an efficiently functioning effective, accountable, and public institution that exemplifies 'best practices' – at all levels of the organization – in terms of management of its human, physical and financial resources.

#### **3.8.2. Strategic Goals**

1. Build an effective and efficient education sector
2. Strengthen human resources and capacity development
3. Strengthen the links between policy analysis, planning and budgeting
4. Use state of the art technology to transform education management
5. Ensure quality assurance for education and training programmes

#### **3.8.3. Management Structure**

The highest priority for the Ministry is to develop an organizational and institutional structure that can support the Ministry over the medium term (to 2011) and in the long term (to 2020) in order to provide the basis for major public administration reforms throughout the Ministry. The Ministry shall be structured and managed along programme lines, with a core policy and management oversight capacity in the HQs and devolved management responsibility of all resources and programme outputs down to

the individual school level. There is need to assess the impact of the present structure, identify constraints and review it to make it consonant to the new needs of the Ministry taking into account the reforms envisaged.

The enactments relating to education shall be amended for greater devolution of responsibility and accountability at all levels of the education system. MOEHR recognizes the fact that decentralization is a powerful strategy to improve service delivery. Over the last decade significant ground has been covered in the implementation of a decentralisation policy, with the creation of Zone Directorates. The Ministry is committed to further the decentralization effort by devolving more decision-making powers and resource management to lower levels of governance.

The education management capacity at zone level shall be enhanced to undertake added responsibility, in particular, strategic planning and implementation. Responsibility, authority and accountability for school outcomes will be devolved to Heads of schools and school boards. This shall be initiated in a phased manner as capacity is enhanced.

MOEHR shall undertake a review of office accommodations at both the Ministry and in the Zones with a view to improving the work environment at various levels. The construction of an Education House which would accommodate the HQs and key parastatals will also be spearheaded.

### **3.8.4. Human Resources and Capacity Development**

The capacity to implement the Strategic Plan depends on the existence of a highly motivated management staff at the Headquarters that would provide policy and strategy direction. New skills and added responsibilities would be required from education managers at all levels. Extensive training and staff development programmes will therefore be needed in order to ensure that staff at all levels builds the necessary capacity to enable them to meet the challenges of the proposed management model. Senior and middle-level managers will require training in strategic planning, management, policy development, procurement procedures, financial management analysis and reporting.

Capacity building has been identified as an integral component of the Strategic Plan and a well programmed human resource development scheme shall be developed and implemented. Rectors, principals and head-teachers will also receive training in education management consistent with the intention to devolve local management and expenditure authority to the school level.

### **3.8.5. Planning and Budgeting**

As part of the review of the organisational and management structure, the Ministry shall set up a Planning and Budgeting Division to strengthen the links between planning and budgeting. The core functions of the Planning Unit will focus on the following:

1. Planning and Budgeting
2. Contribution to policy development
3. Monitoring and evaluation
4. Educational Management Information System (EMIS)

The budget will remain at the centre of policy development and act as an enabler to bring about significant improvements in financial management, budgeting and reporting of budget execution and the results against programme plans. To effectively assume responsibility for the above functions, the staffing capacity of the Planning Unit will be improved to provide a well-trained and motivated staff in planning, budgeting, statistics and information management. Financial and management procedures will be revised to comply with the Public Finance and Expenditure Law. A Financial Management Information System (FMIS) shall be developed to provide timely and accurate financial information for a more informed budgeting and expenditure control.

The disbursement and procurement system shall be improved in order to more efficiently and effectively expend available recurrent and project funds. To improve government construction and maintenance capacity, a Project Management Unit staffed by professionals on contract will be established to take responsibility for construction and maintenance of all MOEHR buildings and structures, as well as the procurement of equipment and resources for such buildings and structures. The unit shall also undertake capital planning through project management to delivery for the total construction and maintenance programme of the Ministry.

This new organisational structure will also provide for a strengthening of internal control and auditing. This internal control and audit Office will be charged with developing a modern audit capability and will concentrate initially on financial and compliance audits, with particular emphasis on the preparation and assurance of the Ministry's Annual Financial Statements. The appointment and procedural establishment of the Office will aim at reinforcing the independence, integrity and tenure of the Auditor and audit staff, consistent with principles established in the Public Finance and Expenditure Management Law.

The Ministry shall develop an Educational Management Information System (EMIS) as a basis for performance monitoring and policy analysis. The current focus of the information system is to prepare an annual Digest of Educational Statistics, the content of which is what is called a 'first generation level' i.e. much basic factual data with little or no attempt at analysis. There is need to change the educational

statistics publication to a 'second generation level' through the production of more analytical information and indicators needed for decision-making.

The Education Management Information System (EMIS) will be linked to the FMIS and also to a Human Resources Information System (HRIS) database for efficient and effective monitoring and to provide essential information that will inform policy-making in the medium and long-term.

### **3.8.6. Technological Support**

A plan shall be prepared to adopt state of the art technology to improve the overall capacity to manage the Ministry. The management and implementation model is based on devolution of management decisions and accountability to Zone Directorates and, through community partnerships, to the individual school level. This management model requires the development of clear rules and procedures as well as a cadre of people who can oversee the spread of improved management and devolved responsibility throughout the system. A modern and robust technological base is needed so that:

1. the Head Quarters of the Ministry can monitor resource and expenditure flows and other management performance indicators
2. information can flow in both directions to facilitate the development of plans and the preparation of budgets
3. there is a platform for the EMIS, FMIS and HRIS – the three main information systems that will support decision-making, resource allocation and management
4. there is a basis for widespread use of office technology and intra-office communications across the island of Mauritius, as well as Rodrigues and the Outer Islands.

### **3.8.7. Efficiency and Quality Services**

The governance structure set up to sustain the reform process shall place emphasis and a high premium on the principles of good standards and quality at all levels. This will ensure that the clients of the system benefit from the various initiatives and programmes. An appropriate mechanism shall be set up to work on the elaboration of standards and quality assurance across the system to enhance the overall quality of education and training in terms of improved learning outcomes.

An audit of existing legislations pertaining to education and training shall be carried out to work out a plan for the review of existing and introduction of new legislations, with a view to creating an enabling framework. Provision shall be made for in-house legal advice and drafting of the new legislation. The terms of reference for this exercise include drafting an organic Law on Education and Training and some important regulations; and establishing, recruiting and training a small number of professional staff to provide long-term legal advisory services to the Ministry. This office will also guide the

development of internal rules, procedures and guidelines consistent with the public management package of laws in cooperation with other departments in the Ministry.

The exercise will also take on board the various pieces of legislation governing the parastatal bodies operating under the aegis of the Ministry. This is urgently called for since a need exists for a lean, flexible and responsive framework that will support and sustain the innovations to be brought in the system.

The Ministry shall conduct an in-depth analysis of the education sector with special attention to education financing and optimisation of strategic assets of the Ministry. As part of this analysis, the Ministry will assess the current Public-Private-Partnership (PPP) financing mechanisms, as well as future options, in order to maximize the efficiency and accountability of the use of public funds for the provision of quality education. Furthermore, this analysis will focus on broadening the base of PPP financing mechanisms and encourage greater private and community participation.

### **3.8.8. Outreach programme**

One of the crucial reasons why reforms have been internationally known to fail is in the misunderstanding of the rationale behind these and the inability of the beneficiaries to relate to them. This explains why they do not participate in the reform process. To ensure a suitable 'buying-in' of all parties concerned, the communication gap needs to be plugged and a sound filtering down process has to be embarked upon.

Through the enlistment of the services of communication professionals and up to date technology, a communication outreach programme will be mounted with a view to

- (i) Providing information on ongoing and proposed educational thrusts on a regular and sustained basis to all partners, stakeholders and community at large;
- (ii) Securing their participation and ensuring ownership; and
- (iii) Obtaining regular feedback and taking these on board for bringing changes and review if necessary.

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### 3.8.9. Activities and Target Indicators

STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
<b>1. Build an effective and efficient Education sector</b>	1.1 Strengthen capacity of MOEHR through the restructuring of the management structure and reporting mechanism.	The new decentralised management structure functional by 2010	<p>1. Setting up of a core cell to drive and implement management reforms in the Ministry with organizational restructuring at both Headquarters and Zone level.</p> <p>2. Develop the capacity of different units at the Ministry, in Zone Directorates and at the school level to sustain the change process</p>
		Performance Management System put in 2009	<p>1. Define Key Result Activity (KRA) and Key Performance Indicators (KPIs).</p> <p>2. Design and begin implementation of an accountability strategy.</p> <p>3. Establish clear reporting guidelines and schedules</p>
<b>2. Strengthen Human Resources and Capacity Development</b>	2.1 Build management capacity for effective delivery of education services	Human Resource Strategy developed by mid 2009	Develop and implement a comprehensive Human Resource policy for the Ministry
		Human resource database developed by mid 2009	Develop and implement a Human Resources database

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
	.	Training needs analysis conducted by end 2009	Identify training needs based on the skills and systems requirements of the MOEHR
		Senior management and support staff at HQ, Zone and School level trained by 2010	<p>1. Develop a coherent and systematic set up and program for staff development</p> <p>2. Develop and make operational a project database that includes the activities of all education partners in 2009.</p> <p>3. Prepare a financial plan for upgrading of existent ICT equipment and the acquisition of ICT equipment, as well as a distribution plan based on the capacity of departments/staff to utilise the equipment.</p>
<b>3. Strengthen the links between policy analysis, planning and budgeting</b>	.3.1 Improve integration of policy development, planning and budget preparation/execution in the Ministry and establish a modern finance and management sector	Planning and Budgeting Unit restructured by 2009	<p>1. Restructure Planning Unit with clear definition of its functions</p> <p>2. Strengthen capacity of Planning Unit</p>
		Fully functional financial management services by end 2009	<p>1. Revise financial and management procedures to comply with the Public Finance and related legislation and generally accepted practices.</p> <p>2. Improve the fiduciary standards of the Ministry</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
		FMIS in place by beginning of fiscal year 2009-2010.	<p>1. Develop a Financial Management Information System (FMIS) for the education sector</p> <p>2. Provide timely, accurate and reliable financial information and expenditure reports</p> <p>3. Review disbursement and procurement capacity within the Ministry in order to more efficiently and effectively expend available recurrent and project funds</p>
		EMIS developed by end 2009	<p>1. Develop and make operational an Education Management Information System (EMIS) for informed decision making</p> <p>2. Establish Internal Audit Department</p>
<b>4. Use state of the art technology to transform education management</b>	4.1 Establish a technological base to support the Ministry's capacity to develop informed national policy, monitor and evaluate progress towards national goals and provide appropriate reports	<p>Plan developed by end 2009.</p> <p>All staff to use ICT.</p>	<p>1. Develop and make operational a project database that includes the activities of all education partners</p> <p>2. Prepare a plan for upgrading of existent ICT equipment and the acquisition of ICT equipment, as well as a distribution plan based on the capacity of departments/staff to utilise the equipment</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>3. Develop and implement a plan for ICT skills acquisition throughout the Ministry</p> <p>4. Work out a phased plan for the harnessing of ICT in all divisions, sections and units of the Ministry through a reinforcement of the ICT unit.</p>
<b>5. Ensure quality assurance for education and training programmes</b>	5.1 Develop a coherent and enabling framework for the delivery of quality services across all sectors of the education system	Quality Assurance Division fully operational by 2010	<p>1. Set up an appropriate mechanism for the elaboration of standards and Quality Assurance across the system.</p> <p>2. Enhance the role of private sector in education and training focusing on public private partnership in educational services provision</p>
		Review of legislation by end 2009	<p>1. Carry out an audit of existing legislations pertaining to education and work out and implement a plan for the review of existing and introduction of new legislations</p> <p>2. Develop an Annual Legislation Plan by the end of the first quarter of each year.</p> <p>3. Build a full set of regulations, instructions and manuals for operation of the Ministry based on the existing legislation.</p>

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STRATEGIC GOALS	STRATEGIC OBJECTIVES	2008-2020 TARGETS/ INDICATORS	ACTIVITIES
			<p>4. Recruit and train a small cadre of legal graduates for review and/or preparation of regulations, directions and other instruments.</p> <p>5. Review the existing institutional frameworks of the Ministry and parastatals.</p>
	5.2 Conduct evaluation of education system periodically	Monitoring of quality of education through international assessments	Participate in international / regional assessment

# PART IV

## 4. Implementation and Monitoring of the System

The EHRSP 2008-2020 indicates what the education system of Mauritius should look like in the future. It represents the ambitions and aspirations of the MOEHR and of the main national education stakeholders. By identifying seven Strategic Goals that in turn translate into seven priority programmes of the Log Frame upon which the PBB is constituted and formulating precise targets to be reached by 2020 it spells out the practical steps to be taken in order to move ahead.

Implementation of the plan, however, will not be a straightforward undertaking. There will be a constant need for careful monitoring in order to systematize learning by doing, and to adapt the plan to changing circumstances and events.

The sequencing, pace and phasing of implementation will, to a large extent, be determined by the development of increased management capacities at all levels of the education system and by the availability of the necessary financial resources. It will also be greatly influenced by the overall socio-economic development of the country, political will to adhere to such a long-term planning process, the involvement of all the Mauritian people to change the existing educational culture, and above all, the commitment of all stakeholders to support the priority elements of the plan in a predicable and sustained way.

In view of the uncertainties, implementation of the plan will be organised in a flexible way on the basis of Annual Operational Plans. Each year a general review of the EHRSP, and quarterly reviews of the Operational Plans, will be carried out in order to assess progress made and problems encountered during the time period under review. The results of these reviews will be taken into account to prepare the Operational Plans for the following year. In this way, feedback from the monitoring process will be fully incorporated into the annual forward planning process.

At mid-term, the review will be broadened to examine the extent to which the medium-term plan (up to 2011) may have to be adjusted, taking into account the short term achievements obtained.

Annual Operational Plans will be based on the programme matrices presented in Annex 20.3. Subject to budget appropriations, they will detail the targets to be reached, the specific activities to be carried

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out and the different inputs (material and human) to be mobilised. They will assign clear responsibilities for the implementation and monitoring of each of the programmes and programme components to specific departments, divisions or units in line with the new organizational structure that is being established through the on-going restructuring of the Ministry.

Of particular importance will be the creation of close linkages between the preparation of the annual plans and the preparation of the annual budget to ensure that they are fully compatible and thereby facilitate efficient implementation. This recognizes the centrality of the budget to the pace of implementation but also reinforces the importance of maintaining the linkages and mutual co-dependence of the Strategic Plan and the annual national budget.

As the MOEHR is one of the first ministries to pilot the application of programme-based budgeting procedures (PBB), this should help in reinforcing these links.

Effective plan implementation will also necessitate the full involvement of the regional and local levels of administration. This is especially important since the future management model envisaged by the Ministry will be based on delegation of management decisions and accountability to regional education offices, district level clusters and, through community partnership, to individual schools.

Therefore, the EHRSP will be translated into Regional (Zone) Plans and into Plans for districts and local communities/schools.

The main constraint for moving in this direction is the lack of technical capacities at the regional and local level to prepare and monitor plans and at the central level to guide and oversee the devolved planning process. The development of technical capacities at both levels will require simultaneous training and the use of the strategic planning process as a capacity building tool.

All Regional/Zone Education Departments will be invited to prepare their own plans within the overall national plan framework (the EHRSP 2020) and all will receive training and guidance in this respect.

### **4.1. Monitoring**

A set of key indicators will be identified which will allow assessment of progress made and results obtained on the basis of objective targets.

Different types of indicators (relating to input, process, output and impact factors) will be needed according to the level at which the monitoring is taking place. At the highest central level, monitoring will concentrate mainly, if not exclusively, on output and impact of the different programmes.

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The basis for preparing the list of key indicators for central level monitoring will be the education indicators. To these, others will be added which will be directly derived from the benchmarks and targets put forward in the Programme Matrices.

Special care will be taken to make sure that all indicators are commonly agreed upon by the different stakeholders in order to ensure smooth co-ordination and co-operation.

The identification of indicators will be accompanied by the preparation of special monitoring guidelines and tools. These will be made available to the different actors involved in order to ensure coherence of monitoring reports and facilitate consolidation at the system level.

The usefulness of the indicators thus identified will depend on the quality of the information available.

Considerable progress will need to be made in improving the Education Management Information System (EMIS) located in the Planning Department of the Ministry. The efforts made so far will be vigorously pursued, improved and reinforced during the coming years in order to equip the Ministry as quickly as possible with a reliable and functioning information system – an essential pre-requisite for efficient planning and monitoring.

The EMIS will be designed so that it can be used for planning and monitoring at regional and local levels as well as at the central level. Budget-related data will be better organised through the FMIS. These two databases will also be linked to the proposed Human Resource Information System (HRIS).

In addition to the regular monitoring reports that will be produced, Annual Financial Statements will also be available. They will be prepared by the Finance Directorate and reviewed by the Office of Internal Audit that will be established as part of the restructuring process of the MOEHR.

### **4.2. Organisational Arrangements**

Overall co-ordination of the implementation and monitoring process will be the responsibility of the Steering Committee, chaired by the Minister (or his representative), and comprise directors of the different departments or divisions in charge of implementing the different programmes or programme components and selected senior advisors. The Planning Department will continue to act as the Secretariat for the Steering Committee and its capacities will be strengthened for that purpose. The Budget and Finance Department will also be part of the Steering Committee.

Initially, the Technical Working Groups will be responsible for the direct preparation of the Annual Operational Plans and for the preparation of monitoring reports under the guidance of the Steering Committee.

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As planning is incorporated into normal management and line-staff become more familiar with the process, it is likely to become more streamlined. In order to improve coordination and develop the capacities of all levels, the Steering Committee will focus capacity-building interventions on techniques pertaining to project management cycles including annual planning.

Plan implementation will be monitored on a regular basis through structured meetings within the different departments and divisions based on the targets and indicators contained in the Operational Plans.

Small quarterly monitoring reports will be produced by the same departments and divisions using simple standardized reporting tools provided to them by the Secretariat of the Steering Committee. The reports will be submitted to the Steering Committee for them to review progress, examine problems and constraints and recommend corrective action where needed.

During the last quarter of each fiscal year, the Secretariat of the Steering Committee will prepare a consolidated annual report on the basis of the quarterly reports and other additional inputs which it might request from the different departments. This report will serve as the basic document for the Annual Review Meeting with stakeholders which will be organized each year (see below). At the same time, Operational Plans for the next year will be prepared for the respective programmes under the guidance of the Steering Committee and submitted to the Secretariat for integration within one overall sector-wide annual plan.

Consultation with national (and where relevant, international) education and training partners will be an essential part of the monitoring process.

Throughout the year, regular meetings will be organized in order to keep all stakeholders informed about progress made and problems encountered during plan implementation.

Toward the end of each fiscal year, a formal Annual Review Meeting will be organised. All stakeholders will be invited. This review meeting will offer a consolidated opportunity to take stock, to jointly assess achievements and shortcomings and to agree on improvements to be made in order to reach the development objectives and targets put forward by the Strategic Plan.

Regional/Zone Steering Committees, under the chairmanship of the Zone Directors, will be established without delay in order to stimulate and co-ordinate planning activities at province level.

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As devolved responsibility for planning becomes a reality, systematic monitoring and reporting procedures will also be put in place at regional and local levels. Specific capacity-building activities in this area will be initiated immediately.