

Chapter 1

Introduction



BACKGROUND

“The illiterates of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and re-learn.”

Alvin Toffler (1928 -)

Mauritius, with its few natural resources, has experienced an astonishing transformation within a short span of 35 years, from a struggling post-colonial society plagued with problems of survival, to a politically and economically stable country. A study of the ingredients that have contributed to this success shows the pivotal role of our human resources who have provided the products and services which are required by the international community. In 1997, the government of Mauritius produced a document known as *Vision 2020*. In this document, which aimed at charting out a development strategy for Mauritius for the next 25 years, the Prime Minister stated that *“The challenge for continued economic growth and higher living standards will not be easy in the face of international competition. Key elements for our success will be liberating the capacities of all our people to increase productivity and to improve the quality of our export products.....I have full confidence in the ability of our people to rise to the occasion and help translate into reality the vision of a prosperous and harmonious Mauritius.”* Mr. Paul C. Du Mée, who has played a key role in the setting up of IVTB (*Industrial and Vocational Training Board*) and who has also been the Chairman of the MEF (*Mauritius Employers’ Federation*) stated in his interview given to the *Business Magazine* (May 2005) that *“I consider that the economic growth in Mauritius is not possible without our human resources; what constitute our force in Mauritius is that the Mauritian, irrespective of his/her socio-economic status, is ingenious.”* The success hitherto achieved in the various sectors places our country among the best ones in Africa as per the usual classification of countries by the World Bank.

Our economy is at a crossroad whereby we are facing lots of difficulties on several fronts be it economic, social, political or moral. The Government should endeavour to bring appropriate reforms in our economy and thus minimise the effects of the various lacunae that lie ahead. This is not an easy task and that is why everyone must put their heads together to face the challenges. Given the cultural diversity of our island, there is no doubt that there is a lot of potential in every segment of our society. Thus these resources have to be tapped and used efficiently in the economy thereby maintaining our cultural heritage. Meritocracy, equity, fairness should be ensured at all levels so as to uplift the image of our country locally as well as on the international scene by attracting more investors.

In fact, the recent budget 2006/2007 clearly demonstrates the drive of the present Government to equate social justice with economic efficiency by boosting the economic growth of the island thereby reducing the toll of unemployment. The wish of the Government is to empower all Mauritians so that they can participate actively in the development of the island. To be able to achieve this, the Government is fully aware that we can no more rely on the traditional pillars of the economy. In this context, measures such as the creation of a minimum of 50 000 jobs over the next five years coupled with the desire to double per capita income to around USD 10,000 in a decade have been announced in the budget. This can be made possible by exploring other sectors such as Seafood Hub, Property Development, the Land Based oceanic industry, the knowledge hub, the medical hub, the pharmaceutical cluster and the expansion of Tourism to Hospitality and Leisure. In parallel, there is a need to build on the existing sectors of the economy. For instance, the budget 2006/2007 does make provision for transforming the sugar industry into a cane cluster which includes different types of sugar; bagasse for electricity generation and molasses for production of ethanol and value added spirits. In the Manufacturing sector, it is intended to integrate the EPZ and non-EPZ subsectors to provide level playing field for SMEs.

Given that the priority of the State is to create job opportunities while addressing the issue of skills mismatch, an Empowerment Programme has been created to offer a wide array of facilities for skills development at different echelons of the society. The Programme is a multi-pronged strategy as it will reap numerous benefits not only for the unemployed but also for those recycled from their jobs, for women, for our young people entering the labour force and for small and medium entrepreneurs. As such it will facilitate the transition from sugar, textiles and other activities hit by shocks, into higher value added activities with better remunerated jobs. Given that training will be a major component of the Programme, it will encompass formal courses, on the job training and the expansion of the Apprenticeship Scheme. As a matter of fact, in the budget much focus has been laid on skills development and upgrading in various sectors including Tourism and Hospitality and ICT. The need for language training, customer care and ICT proficiency have been emphasized.

The Empowerment Programme through the Workfare Programme is expected to offer training and reskilling activities geared towards women while taking account of their need to have for more flexible working conditions and facilities for taking care of their children. In addition to its training and reskilling component, the Programme will also encourage entrepreneurship among women including a handicraft programme for women with the participation of experienced trainers from countries that have achieved excellence in that field. This will undoubtedly address the issue of female

unemployment and their corresponding earning capacity. It has to be noted that female unemployment represents 35 percent of the labour force, and 61 percent of the unemployed population. In addition, the Minister of Finance has mentioned in his budget speech that the Empowerment Programme will finance an on-the-job training in the private sector for some 20,000 unemployed and recycled workers over the next five years. The annual intake in this Workfare project is envisaged to be 4,000 for up to a full year of training with a monthly stipend of Rs 3,000 that will be equally shared between Government and the private sector. Under the Workfare Programme the identification of training needs as well as potential employers to absorb trainees is being carried out by two Government/Private sector Committees focusing on Tourism and the ICT sector, respectively.

Such measures are important as the levels and patterns of skills possessed by the labour force at higher stages of development are different from and higher than those prevailing at the lower stages of development. Presently, businesses everywhere have to compete in a world that is changing faster than ever. To keep pace, they need people who can generate new ideas and adapt to constant changes. Many companies say it is harder to find these people. For instance, in an interview given to the Business Magazine (May² 2005), the Ex-Chairman of Mauritius Export Processing Zone Association (MEPZA) said that *“The problem lies at the level of manpower which is becoming difficult to find. That is why we need to rely on expatriates - otherwise the future of the textile industry will be in danger”*. This shortage in workforce has been felt at a time when many people have lost their jobs. The UNDP report (UNDP, 2004) states that the number of jobs has decreased by 7426 during the first six months in the year 2004, and that between 1991 and 2004 the local workforce in the Export Processing Zone (EPZ) has decreased by 30 percent. Clearly, the companies are facing difficulties in recruiting people locally. It is not that there are not enough people to go around; it is that too many of them do not possess the required skills and competencies. There are those who are unemployed but who are not willing to take up jobs in any sector. The shortage of skilled people can act as a limiting factor on individual organisations and on the economy as a whole. Many local businesses are unable to expand because of the difficulty in finding people with the right skills. The intervention at an early stage of the stakeholders to ensure human resource planning and development become necessary in order to decrease the mismatch between the demand and supply of manpower. In fact, manpower projections should form an integral part of educational and training (including on-the-job training) planning in order to have an in-built system of career development and job enrichment aimed at improving the quality of life of all citizens and at promoting the expansion of existing businesses.

This clearly indicates that to have a competitive advantage in this hypercompetitive economy, we must foster innovation on the widest possible range of platforms. We must be able to offer to the world value-added products and services. New technology will definitely play a crucial role in this process of restructuring as it will increase the product range for tapping new markets and meeting competition as well as provide better customer service, while saving time in developing new products. For instance, in the transformation of the sugar industry into a cane industry, there is a need to have the appropriate technology transfer. In the textile industry, technology upgrading must take place in order to produce fashion garments. According to the NPCC report (NPCC, 2005), Mauritius will need to open itself to global firms with the available technologies and market connections.

In a general perspective, as a country enters world markets, it has access to newer forms of technology and organisational arrangements. There is a greater need for skilled workforce. The new technology being brought from abroad by its investment in physical capital requires more skilled workers to operate it. A major option for Mauritius is to turn towards high-tech industries; consequently, it will require a highly educated and skilled workforce. In any case, the extent of technology transfer is dependent upon the absorbing capacity of the human resources. The absorbing capacity, in turn, is dependent upon the availability of a workforce with the general educational background and technology-specific training. It is a fact that, at times, even if there is an abundance of an educated workforce, it may still lack the skills and abilities to digest, absorb and diffuse modern technology. This calls for retraining. In Japan and Korea (Virmani & Rao, 1999), there are built-in incentives to allow the workers to constantly upgrade their skills and knowledge. It is only by upgrading the potential of our human resources continuously that we will ensure that they can contribute to the process of development in a productive manner. This upgrading must take place irrespective of the stage of the economic growth and of any particular phase through which the economy may be passing - this would be a major step to negotiate the challenge of rapidly changing technology. Therefore, human resource development should be the key to any technology transfer and upgrading. Otherwise, our country's efforts to upgrade to higher technology and more skill-intensive products with changing comparative advantage will be made more difficult. Furthermore, the ability of local enterprises to move to higher value added production will be hampered.

With globalisation, the Mauritian economy has no choice but to open up and compete with the other players. The spirit of entrepreneurship and creativity must be instilled in the various sectors of the economy so that it leads to the creation of employment opportunities thereby contributing to a coherent strategy for sustainable development. After analysing the difficulties being faced by our textile industries and sugar factories, everyone will agree that our country needs to rethink its development strategy to meet the new daunting challenges. Our country had to face similar situations after the cyclone Carol in 1960; the restructuring of the economic development in line with the report *The Economic and Social Structure of Mauritius* (Meade, 1961) allowed the country to promote export-oriented manufacturing. The future competitiveness of the Mauritian economy is challenged by the erosion of the trade preferences and the emergence of *low-cost* competitors like China and India. According to the International Monetary Fund (IMF, 2004), Mauritius forms part of the economies that are most vulnerable to a fall in export revenues following the phasing out of trade preference treatments. Therefore, in order to have sustainable economic growth, Mauritius will need to explore other areas of development. Such potential areas of opportunity for Mauritius have been discussed in various forums. Information Technology Enabled Services (ITES) and International City State (ICS) have been proposed by NPCC (NPCC, 2005). The Board of Investment Mauritius (BOI, 2005) also invites people to invest in several other sectors including Seafood hub, Financial & Business services, Regional Headquarters (attract multinational companies to set up their regional office on the island) and Freeport. All these new ventures will require skilled people. To attract investors and multinational companies to set up their businesses in our country, we must adopt proactive human resource development policies which will ensure that the local workforce can achieve equivalent or better standards of productivity as compared to those in the other countries. We would not succeed in these emerging sectors simply by doing better than what we have done in the past - we must learn to be creative and innovative.

With under-employment and unemployment in Mauritius, it is necessary to ensure that there is social justice, equal opportunities and the creation of more productive jobs. During the past few years, we have been witnessing repeated episodes of redundancy especially in the EPZ sector. Several companies are shedding large number of employees, in successive batches. Organisations now face the need to manage the transition phases which are resulting in the reduction of the labour force. The current scale and pace of change seems to be both quantitatively and qualitatively different from any experienced before. The resulting reduction in labour force requirements has had many macro and micro repercussions. Sugar factories and even textile industries like *Floreal Knitwear* that have traditionally espoused a patriarchal attitude towards employees, offering security of employment and a lifelong career, have not gone unscathed. It is certain that, in future, several other organisations will need to navigate many such transitions in order to meet business objectives. Restructuring will often lead to redundancy or the requirement of different kinds of skills, resulting in surpluses in certain areas and shortages in others. Job losses will continue to be part of such changes and they will continue to lead to potentially traumatic transition for employees. Work is a social activity which not only provides the means for economic existence but is a source of social identity and status. Because of the various functions of work, redundancy can provoke a range of responses from individuals. These include a loss of dignity, a loss of confidence, anxiety and despair. Crisis in one organisation often affects employees working in other similar organisations - in fact, they also suffer from low motivation and morale, and from an increased stress and scepticism. There is a need to have a humane management of redundant employees so as to overcome some of the adverse effects of redundancy. There is a need to develop outplacement policies and new practices to deal with the redundancy transition. Those being exited must be supported through structured programmes; such persons must be provided with a tool-kit of techniques and skills which will help them to re-enter the job market. The closure of a site must be accompanied by a programme of redeployment which includes counselling and training. It will be in the interests of both the country and the organisations to assist individuals experiencing the change process through proper human resource planning.

The Benefits of Human Capital Investment

The early development planners over-emphasized the role of physical capital in economic growth. When economists began to measure the sources of economic growth, what previously had been considered as an unexplained residual - an unexplained factor - became identified as human capital. From studies of the development of the American economy, and the sources of growth of many countries around the world, it has become evident that human capital — the skill of the population — plays a major role in the productivity of nations . Capital and skills are complementary; each factor raises the productivity of the other. An investment strategy that emphasises physical capital to the exclusion of human capital fails to capture the benefits that can arise from a more balanced investment strategy. For instance, it takes skilled workers to make the most efficient use of modern technologies. In fact, development of human resources is recognised as the most crucial objective of long term economic growth (Shrivastava, 1999).

There has been an endeavour to attract local as well as foreign investment in order to ensure an influx of foreign currency in the country. In fact, the Government is willing to encourage the Mauritian diaspora to invest and contribute actively to our country's development. Along these lines, the Government has recently decided to become a member of the International Organisation for Migration (IOM) whereby this organisation will assist in attracting investment from the Mauritian diaspora as well as opening new avenues for Mauritians to save money and learn new skills abroad before returning home to start a business. The services of IOM will assist in identifying appropriate programmes.

It is analytically useful to think of human capital as another, very valuable, kind of capital. The term "human capital" sometimes suggests a depersonalization of the individual and is associated in the popular mind with a dehumanizing society that equates men with machines. In fact, it is just the other way round. The human capital concept recognises that human beings are as important, if not more important, than physical capital in creating wealth and generating a successful economy. The concept of *human capital* encompasses investment in the skills of the labour force, including education and vocational training to develop specific skills (Price, 2004).

To understand how human capital affects the economy and why it should be promoted, let us consider how human capital improves productivity. First of all, human capital is productive because of its immediate effect on raising the skills of workers. So, for example, if you train an individual to be a better accountant, the accounting performance of that individual will rise. If you train a worker to fix an engine, the worker will be more productive in fixing engines. These are the obvious direct effects of making people more skilled.

Human capital also improves the adaptability and allocative efficiency of resources in a society. It allows agents to allocate resources more effectively across tasks. It enhances the ability of agents to adapt to change and to respond to new opportunities. With globalization, the world economy is changing and Mauritius will have to adapt to the changes. An empirical regularity that has emerged in numerous empirical studies is that the more educated and better skilled the people, the better they are able to adapt to changes. They are able to benefit from opportunities that become available and create new opportunities of their own. They enhance productivity in the workplace. Greater skills also facilitate worker mobility across occupations, industries and regions in response to new opportunities, and help people reallocate resources, both human and physical, towards more productive opportunities, and even to realize that those opportunities exist.

Presently, out of every 100 students joining standard one at primary level, only 35 access the upper secondary level, and only about 28 successfully complete the Higher School Certificate or A-level examinations. The number of children participating at various stages of the local education system has a sharp pyramidal structure which indicates the inherent level of wastage, and the serious difficulties faced by our children to progress through the existing educational set up. The system in its present state forces extremely large number of children to leave after several years of schooling without relevant recognition of what they are able to do. A significant proportion of the national budget is spent on

education annually. However, due to the large number of drop-outs, it is clear that not all children are able to benefit fully from the educational facilities provided by the state. The rate of returns to the investment on education is low. There is a need to set up a proper system of recognising the positive achievement and capabilities of the the drop-outs and provide them with the basic training. “Without basic literacy and numeracy, people’s ability to adapt to changing production methods and technologies is severely constrained” (UNDP, Human Development Report,1996). Education provided to our children must be relevant to them and to the employers.

No systematic study has been undertaken of the skills needed by enterprises in Mauritius. A number of developed countries like the United States, United Kingdom, Norway, Australia and New Zealand have worked out the generic skills which workers would need to perform well in their workplaces in the future (ILO, 1996). In the United States there is the Secretary of Labour’s Commission on Achieving Necessary Skills (SCANS) on What Work Requires of Schools: A SCANS Report for America 2000 and the American Society for Training and Development (ASTD) report on Workplace Basics: The Essential Skills Employers Want. In the case of the United Kingdom, the work on core skills was undertaken under the National Council for Vocational Qualifications (NCVQ) whilst in New Zealand, it formed part of the development of the National Curriculum. In Australia, the key competencies were developed under the aegis of the Australian Education Council and Ministers for Vocational Education, Employment and Training. All these reports were produced in the late 1980s or the early 1990s. As Mauritius progresses into the 21st century, these generic skills will increasingly be applicable. Schools, other education and training institutions will need to incorporate the teaching of these basic workplace skills in their curriculum to ensure that future labour market entrants are properly equipped for the world of work. Likewise, enterprises need to teach these skills to their existing employees. Enterprises in the industrialised countries, particularly the larger ones, are undertaking such training. A study of thirty important US corporations (Meister, 1994) showed that they have expanded the scope and mission of training from merely upgrading the technical skills of their professional managers. This ensured that all their employees as well as key customers and suppliers understood the company’s quality vision; consequently, employees developed the skills and competencies needed for success.

Presently major national decisions on education and training in Mauritius are made by the government. The government has shown its determination to re-orient the education system in such a way so that the potential of students can be fully exploited and that ultimately, they are offered better opportunities. Training should be a continuous process and the government will have to ensure the provision of high quality and up-to-date training. The objective of the government should include making education accessible to everyone, in line with the orientations of a welfare state based on social justice. This explains why the democratisation of the economy is the priority for the government of the day. A major responsibility of education and training institutions is to produce trained manpower to meet the needs of the industry. Therefore, employers should have a greater involvement in national education and training policy making. They should be consulted as a matter of fact in the formulation of major education and training initiatives. It is in the direct interests of businesses to get involved in education reform; they should engage in creative partnerships with schools and universities to exchange expertise

and ideas. Enterprises will have to work with the government and educational institutions. Basic literacy and numeracy skills should be taught to employees without a sound foundation in primary schooling. The literacy and numeracy of those with primary education should be upgraded to secondary school level. Such an upgrading scheme should be opened to those who have mastered basic literacy and numeracy skills. The rationale behind these schemes is to enable those who have completed such programmes to proceed with basic skills courses. Courses will have to be specially worked out to enable those who have successfully completed such programmes to undertake skills training. Besides, all our infrastructures need to be modernised with a view to raise the standard of living for all inhabitants.

The exponential growth of knowledge and the rapid change of science and technology is another global trend. Knowledge is doubling every 7-10 years. The resultant relatively rapid obsolescence of knowledge and skills have implications for human resource development. The Week-End Australian newspaper contacted education experts in a range of fields to estimate the time after shelf-life (number of years after which an upgrading is necessary) of Australian undergraduate degrees (The Week-End Australian, May11-12 1996). The shelf-life of the degrees were estimated as follows: 1 year for computer science, 2 years for electrical engineering, 3 years for accounting and general medical practice, 4 years for business, 5 years for civil engineering and biotechnology, 10 years for dentistry and surgery and 15 years for architecture.

All the education experts contacted agreed that the undergraduate degree provided the essential “intellectual capital” on which to build future learning. The rapid rate of accumulation of new knowledge and the fast pace of technological change will mean a need for regular knowledge updating and skills upgrading for everybody including those who have successfully completed tertiary education. More frequent job changes will become the norm. Schools and other education and training institutions will have to teach the ability to learn and inculcate the acceptance of life-long education and training. Continuing education and training programmes will have to be developed by not only education and training institutions but also by professional bodies.

[Learning from the experience of Singapore](#)

The spectacular economic growth of Singapore continues to be studied by many authors (Tyson, 1997; Virmani and Rao, 1999; Price, 2004). Singapore remains a classic example where the state plays a major role in ensuring education as well as constant upgrading of skills on a continuous basis. The State subsidises the skills upgrading programmes. The government of Singapore took a major initiative in continuous skill upgrading through a separate fund set up for that purpose. Malaysia also emulated the Singaporean model. By adopting proactive policies, these countries have been able to reduce the adverse effects of redundancies.

At the time of its independence, Singapore had a population of unskilled labour and low literacy rate. Initially, local industries were started up as labour intensive units using semi-skilled and unskilled labour, as for example in textile industry. The focus in the late 1960s was to encourage entrepreneurship and set the ball rolling for industrialisation. The government encouraged

multinational companies (MNCs) to invest in Singapore and bring in the latest technology and expertise as well as internationally competitive products to meet the demands of export. These MNCs also brought in the much needed capital for investment and employment opportunities during the critical stages of the country's economic development. Gradually, the focus shifted to the encouragement of capital-intensive industrialisation in the 1970s. In the 1980s, greater emphasis was given to knowledge-intensive industrialisation with the introduction of increasingly sophisticated technology. The emphasis shifted to service industries instead of trade and manufacturing activities by the late 1980s. The government has followed a policy of encouraging foreign investment (up to 100 percent) provided 50 percent of the products are exported. In 1990, Singapore ranked fourth in the world in its share of foreign investment. In the *World Competitiveness Report* of 1995, Singapore was ranked at number two position. In 1996, Singapore was declared a developed country and qualified to join the Organisation for Economic Co-operation and Development (OECD). To attract foreign investment, the government offered various incentives such as quick clearance of proposals, tax incentives, modern port facilities which are being continuously enhanced, without any government interference, no special protection to any industry, a strong financial market, and a congenial industrial climate. The GDP has increased from S\$ 2100 million to S\$ 89 000 million between 1960 to 1993.

The government of Singapore has given major emphasis to skill development and upgrading of human resources to meet the expanding requirements of the industry. It has been the conscious policy of each company to train its human resources in the most modern technologies and systems. At one stage, it was felt that the companies were not coming forward with substantive investments in training and skill upgrading of its employees. To meet the expanding requirements of skilled professionals, it was felt that the government itself would have to take the lead. To achieve its objective, the government created a Skill Development Fund. It was made mandatory for organisations to contribute one percent levy on workers' earnings per month to the fund. The National Productivity Board (NPB) of Singapore has entered into a partnership with various large multinational companies which have the expertise to conduct specialised training programmes in their own sphere of activities. Some of the major companies which entered into joint ventures with NPB include Motorola, Philips, IBM, Singapore Airlines etc. The NPB also gives industry-based training programmes for small and medium organisations. When it was felt that a substantial number of workers lacked the basic numerical ability and knowledge of English, the government decided to start the Basic Education and Skill Training programmes (BEST) where the main focus was on basic Mathematics and the English language. Once the employees have undergone the BEST programme, they are put through an advanced programme on numerical ability and then they were given training on computer operations.

The government of Singapore continuously identifies industries which suffer from low productivity and then helping them through consultancy, technology guidance and appropriate training to enhance productivity. In Singapore, organisations are compelled to constantly upgrade their human resource skills because of the export thrust and external competition.

Economic Overview of Mauritius.

Since its independence in 1968, Mauritius has achieved an exceptional and sustained economic development. From unsteady infant steps in the 1960s as a monocrop economy, Mauritius has matured into a diversified and resilient economy in the 1980s and 1990s. Thanks to an economic growth rate averaging six percent over the past twenty years, Mauritius has become a middle income country and GNI per capita at current market prices increased to attain Rs 149 717 in 2005 as compared to Rs 128 232 in 2003 (National Accounts, CSO 2005). It is particularly noteworthy that Mauritius has combined rapid economic growth with exemplary social achievements like universal access to primary health care, free access to education and consolidation of the social security services. Table 1(a) below shows some macroeconomic indicators for Mauritius from 2000 to 2005.

Table 1(a): Selected social and economic indicators, 2000 - 2005

Republic of Mauritius	2000	2001	2002	2003	2004	2005 ³
Population (mid-year) ²	1,187,162	1,200,170	1,210,485	1,223,100	1,238,061	1,248,585
Annual population growth	+1.0	+1.1	+0.9	+1.0	-	+0.9
Total employment (mid-year) ²	483,600	490,800	490,100	495,100	504,500	506,600
Tourist arrivals (Number)	656,453	660,318	681,648	702,018	718,900	761,100
GNI at market prices (R M)	118,711	132,611	142,715	156,841	175,332	186,179
					142,122	149,717
Real annual growth of GDP at basic prices (%)	+9.3	+5.5	+1.8	+4.4	+4.7	+2.7
					4.7	4.9
GDP at market prices (Rs M)	119,494	137,092	141,903	156,906	175,542	185,355
					142,438	149,901
Real GDP Growth Rate (%)	9.3	5.8	2.5	4.4	4.8	2.3
					8.5	9.6

² figures include foreign workers

³ preliminary estimates

Source: CSO, National Accounts (2005)

An analysis of Table 1(a) reveals (i) that Mauritius has enjoyed a growth rate averaging 4-5 percent per annum, (ii) the inflation rate has been kept under control and (iii) per capita income has been steadily increasing..

The country has experienced a low growth (2.3percent in 2005 instead of 7-8 percent), mainly because our traditional sources of growth and export income, Sugar and EPZ are running out of steam. In addition, some macroeconomic indicators are a source of concern. For instance, the rising Public Debt and Recurrent Deficit put at risk the maintenance of the welfare state. Social expenditure has risen from 10.7 percent to 15.1 percent of GDP (1985-2001).

One should acknowledge that the success of the Mauritian economy has been largely dependent on preference treatments in the main export markets for sugar and textiles. Mauritius was beneficiary of several preference treatments from its key trading partners namely the EU Cotonou Agreement (formerly the Lome Convention), and the African Growth and Opportunity Act (AGOA) - Wearing and Apparel Provision, United States.

Today, in a World Trade Organisation (WTO) driven world, the future competitiveness of the Mauritian economy is challenged by the erosion of these trade preferences and the emergence of low-cost competitors from which Mauritius is no longer protected by quotas and preferential tariffs. For the past few years, warning signals regarding the frailty of the Mauritian economy were being received from all sectors of the economy. It is unfortunate that such repeated warnings have proved true over time. Against the spectre of dismantling of preferential agreements and tougher global players, Sugar and EPZ are being forced to reposition themselves and rethink their strategy.

The International Monetary Fund (IMF) believes that Mauritius is one of the economies that are most vulnerable to a fall in export revenues following the phasing out of trade preference treatments. This is because of its high reliance on sugar and textile exports (i.e. its undiversified export base). Mauritius is also exposed due to its high dependence on the EU and US markets and the high degree of preferences in these markets. Sugar exports to the EU have benefited from the Sugar Protocol (NPCC, 2005). But, following a recent WTO ruling triggered by complaints from Brazil, Australia and India, the guaranteed sugar prices has already declined by 36 percent and this will represent a loss of revenue amounting to Rs 4 billion with negative impact on the Mauritian economy.

The success of the Mauritian economy can be explained by a well-planned economic diversification strategy, combined with sound macroeconomic policies have borne their fruits. The average growth rate during the 1984–2002 period averaged 6 percent. The diversification pattern was reflected in the employment trends. For example, the share of agriculture in employment in large establishments has declined by five times from a high of 46 percent in 1970 to 8.6 percent in 2002. It is worth noting that

from 23 percent in 1968, agriculture, which is still dominated by sugar, accounted for an average of 6 percent of GDP in 2004 (National Accounts, 2004).

The Manufacturing sector represents a major growth sector and is divided mainly into EPZ, which started in the early 1970s, and non-EPZ. It has a significant contribution to GDP, total employment and foreign exchange earnings as shown in Table 1(b). In recent years, this sector has endured a downturn mainly due to fierce competition from abroad in a new liberal trading environment. Within Manufacturing, it is the EPZ sector that has suffered the most, contrasted with a negative growth rates over the past three years. This had led to the closure of many textile firms with huge loss in employment.

The Tourism sector, on the other hand, acts as the third pillar of the economy and recorded high growth rates in the 1990s. It is the third largest foreign income earner for the country and the contribution of the Tourism sector to GDP was 7.8 percent in 2005 (National Accounts, 2005). Table 1(b) gives an indication of the contribution to Gross Domestic Product of different industries for the year 2001 to 2005. The figures in Table 1(b) show, in details, the contribution of each sector.

Local authorities form one of the pillars of the Mauritian economy whose roles need to be reviewed. Thus, in line with good governance, the government need to put in place a charter to reallocate responsibilities to local authorities such that there is no overlapping of duties among the public authorities. These changes will definitely bring a higher degree of political equilibrium and change the lives of citizens for the better. The qualitative change that this government is proposing for the society calls for a review of the role of the state and the different stakeholders.

Acknowledging that the traditional sectors of economic growth like Sugar Industry, Textile, Manufacturing, Tourism and Financial Services can no longer sustain the economic growth, the government is currently broadening and adjusting the economic base with the development of the Information Technology sector, Seafood Hub and a Knowledge Hub. Mauritius is also aspiring to become a duty-free island (Budget Speech, 2005) and an international city-state (NPCC, 2005). This comes in the wake of the changes in the global economy, whereby, Mauritius faces fierce competition from abroad. Thus, Mauritius now faces a series of new challenges and responsibilities.

The Mauritian economy has since recently relied heavily on its four pillars for its development, but, these sectors are showing signs of running out of steam. Sectors like Sugar and EPZ which provided the bulk of jobs to the Mauritian workforce, are stagnating and even experiencing a downturn. The government is looking for new avenues and new industries which can absorb the alarming increase in unemployment. According to the Central Statistical Office (CSO) figures, the year 2003 showed an unemployment rate of 10.2 percent and 9.5 percent in 2005. Table 1(c) shows an overview of economic indicators from 1990 to 2005 for Mauritius.

Table 1(b): Gross Domestic Product by industry group: percentage distribution (2001-2005)

	2001	2002	2003 ¹	2004 ¹	2005 ²
Agriculture, hunting, forestry and fishing	7.3	6.9	6.4	6.5	6.4
Sugar Cane	3.9	3.1	3.2	3.5	3.2
Other	3.4	3.2	3.1	3.0	2.8
Mining and quarrying	0.1	0.1	0.1	0.1	0.1
Manufacturing	23.3	22.8	21.5	19.8	18.7
Sugar	1.2	1.0	1.0	1.0	1.0
EPZ Products	11.6	10.9	9.6	8.7	7.5
Other	10.5	10.7	11.0	11.2	11.3
Electricity, gas and water supply	2.2	2.4	2.6	2.3	2.1
Construction	5.8	5.8	6.0	5.8	5.8
Wholesale & retail; repair of motor vehicles, motorcycles, personal and household goods	11.7	11.8	11.2	11.4	12.0
Wholesale and retail trade	11.1	11.3	11.2	10.7	11.3
Other	0.5	0.6	0.8	0.7	0.7
Hotels and restaurants	6.3	6.0	6.9	7.4	7.7
Transport, storage and communication	12.8	13.7	13.4	12.9	12.7
Financial intermediation	8.7	9.6	10.0	9.8	10.3
Insurance	2.4	2.8	2.7	2.8	2.8
Other (mainly banking including offshore)	7.3	6.9	7.3	7.0	7.4
Real estate, renting and business activities	8.9	9.9	9.6	8.6	10.2
Owner occupied dwellings	4.3	4.3	4.7	4.7	5.0
Other	4.6	5.0	4.8	4.9	5.2
Public administration and defence; compulsory social security		6.6	6.8	6.9	7.1
Education		4.6	4.7	4.8	4.6
Health and social work		3.0	3.2	3.3	3.4
Other community, social and personal service activities and private households with employed persons	3.7	4.0	3.5	3.5	3.7
FISIM	-5.3		-5.8	-5.1	-5.5
	100.0	100.0	100.0	100.0	100.0

1 revised estimates

2 preliminary estimates

Please note that the figures do not add up to the totals due to rounding errors

Source: CSO, National Accounts (2005)

Table 1(c): Economic Indicators at a glance in percentage distribution (1990 – 2005)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 ¹
Economic Growth	8.6	4.3	6.7	4.9	5.3	5.8	8.0	5.6	5.6	2.3	9.3	5.6	1.8	4.4	4.7	2.7
Agricultural Growth	6.6	-1.9	6.5	-6.8	-7.4	8.4	4.1	3.4	-1.5	-25.8	33.3	7.2	-14.4	1.6	6.0	-6.5
EPZ Growth	9.0	5.0	6.0	6.0	4.3	5.0	7.0	6.0	6.9	6.0	6.0	4.4	-6.0	-6.0	-6.6	-13.0
Tourism Growth	10.0	4.5	10.0	12.0	10.0	9.0	16.0	10.2	6.0	4.0	13.5	1.0	9.2	-9.0	+2.4	+5.8
Construction Growth	8.0	8.0	10.0	6.0	8.0	-2.0	4.5	-1.0	6.0	8.5	7.5	1.5	7.5	+10.2	+0.5	-4.4
Savings Rate	21.4	24.1	26.1	24.7	23.6	23.3	24.0	24.5	26.2	25.8	25.8	26.4	27.2	26.0	22.7	17.0
Investment GDP Ratio	31.4	29.0	27.8	28.4	31.7	24.2	26.0	27.1	29.2	27.6	29.5	22.6	22.1	22.9	21.8	21.3
Real Investment Growth	20.5	-2.9	4.1	4.8	12.5	-14.7	15.0	10.6	-6.7	22.1	-8.2	2.7	1.9	11.2	-	-
Employment in the EPZ (No.)	80,008	90,961	89,807	89,821	82,178	80,466	79,739	80,391	90,116	81,374	90,882	87,807	87,204	77,520	86,022	86,901
Number of EPZ Enterprises	588	598	558	538	494	481	481	480	485	512	518	522	506	506	501	506
Closures	57	34	61	60	69	38	43	27	33	20	28	20	25	23	25	19
New Enterprises	62	52	33	38	27	25	43	26	48	37	34	24	9	23	20	24
Inflation	13.5	7.0	4.8	10.5	7.3	6.0	8.8	6.6	6.8	6.8	4.2	3.4	6.4	3.9	4.7	4.8

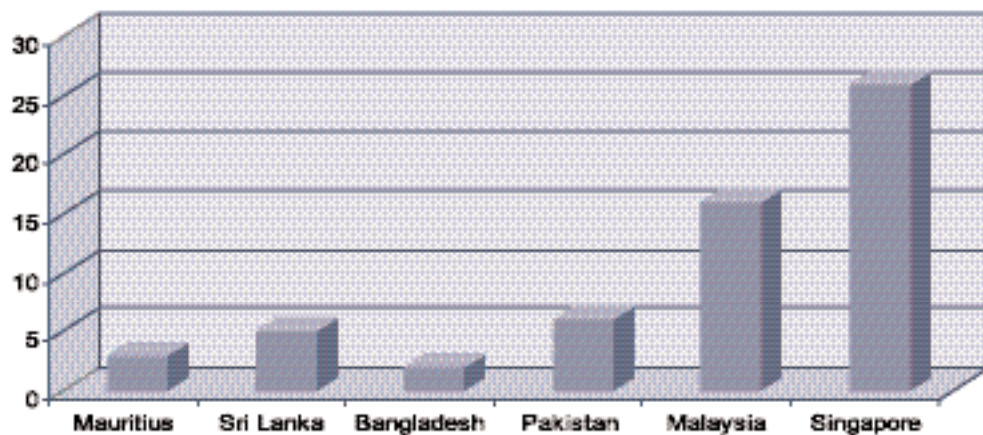
1 preliminary estimates

Source: Memorandum on Wages Policy, MEF (2004) and National Accounts (2005)

Foreign Direct Investment

One of the main sources of investment in the past in Mauritius had been Foreign Direct Investments (FDI) and this was notable in the Manufacturing sector (EPZ) in the late 1980s and early 1990s. However, in the past few years, Mauritius has been much less effective than other developing countries in attracting foreign direct investment. According to WTO assessments, this could be linked to the lower performance of existing sectors facing increasing production costs, as well as labour

Figure 1.1: Inflows as a percentage Gross Fixed Capital Formation (GFCF) for selected countries, 1993 – 1999



Source: Commonwealth Secretariat, *FDI Promotion in Mauritius and Sri Lanka*

market rigidities, and the implicit protection of domestic business space. Figure 1.1 shows the FDIs for a few selected countries.

It can be seen from Figure 1.1 that Mauritius has not been able to attract enough FDIs as compared to other countries. In fact, it had only fared better than Bangladesh.

The government, in view of boosting foreign investment, set up the Board of Investment (BOI) through the Investment Promotion Act 2000. The main objective of the Board of Investment is to stimulate the development, expansion and growth of the economy by promoting Mauritius as an international investment, business and service centre. It also promotes and facilitates the development of all forms of investments and business activities in areas of research and development, design, production, marketing, distribution and all types of corporate services. So as to increase Foreign Direct Investments the Government seem to be well determined to promote Mauritius as an attractive and privileged destination with reliable institutions.

Way Ahead

Therefore, looking at all the indicators of growth and the projections, it seems that for Mauritius to progress economically, it cannot rely solely on its few pillars and preferential trade agreements. The economy needs to be re-oriented towards new highways of development. The government is already undertaking reforms in the agriculture, EPZ and tourism industry. New avenues of development have been identified like the Knowledge hub, ICT, Seafood hub, Duty Free Island and so on.

One important thing that Mauritius needs to recognise is that the economy is small and that with the globalisation of the world economy, survival of the fittest is the key word. The Government has to make sure that the rich and big countries do not ignore small islands like ours. The island needs to be reconstructed and failure to achieve this goal is no more an option. Mauritius will have to make sure to be competitive in the world market in order to survive. Mauritius does not possess any natural resources and its only resource is its people. The country will have to take maximum advantage of that by upgrading its human resource continuously. The government has recognised the importance of its people and this is the main reason for continuous increase in spending on education and training.

There has been much emphasis in the last budget for reforming the labour laws and regulations in order to achieve the flexibility needed for creating demand for labour together with the security needed to protect the worker as the latter switches between jobs. The present Government has recognised that there is a need to focus not just on protection of income but on providing opportunities to upgrade skills to make workers more versatile in switching jobs. Flexibility in employment regulations is therefore the cornerstone to create employment. Along these lines, there is a strong willingness by the Government to put up with a wage determination system and labour laws that have previously focused on protecting jobs rather than protecting workers thereby leading to high unemployment and vacancy rates. The easier it is to recycle labour, the more workers will be hired and the faster will be our return to achieve higher levels of growth.

Our government has to ensure that everyone lives in dignity and that no segment of the population becomes an outcast of the society, be it senior citizens, widows or orphans. Increasing the standard of living of our inhabitants also imply that each person has to obtain an equal share of the national revenue. This is in line with the philosophy of the government to put people at the centre of the development. In fact, the Government is trying to make ICT a pillar of the economy so that it adds to the national wealth.

With globalisation progressing apace, there is no doubt that relying solely on the four traditional pillars of the economy is not the right formulae to face external shocks and register higher growth levels. The only way out is to build our resilience by empowering our human resources in various ways such that Mauritius remains competitive on the local as well as international scenes. A paradigm shift is crucial so as to successfully fit into the constantly changing environment. As rightly stated in the budget 2006/2007 by the Minister of Finance, "we need to set firm foundations for more economic pillars, some of which need to grow and some to be established."

National Human Resource Development Plan

Traditionally, the concept of human resource development has always been looked at from the point of view of the supply side. It has been presumed that economic growth assumes a certain quantity of skilled personnel. Consequently, much effort has been geared towards ensuring a steady supply of personnel with the general educational background. We have been teaching to our children what had been taught to us. We have rarely asked the question whether the skills being supplied in our educational institutions are those which are really in demand. This kind of approach is based on a strict one-to-one correspondence between educational process and job market. General education often leads to a situation where there are shortages of critical skills on one hand and large number of educated unemployed on the other. There is a need to have a planned orientation of education and training to employment needs generated by our growing economy. The emphasis today should be to increase and tap the creative aspect of human intelligence by diversifying educational and training facilities. It is also important to promote activities which will develop our human resources into knowledgeable, skilled and trained manpower.

According to Shrivastava (Shrivastava, 1999), human resources development (HRD) is *the process of increasing the knowledge, the skills, and the capacities of all the people in the society. In economic terms, HRD could be described as the accumulation of human capital and its effective investment in the development of the economy. In political terms, HRD prepares people for adult participation in political processes. From social and cultural points of view, HRD helps people lead fuller and richer lives.* Price (Price, 2004) defines HRD as *a strategic approach to investing in human capital. HRD draws on other human resource processes, including resourcing and performance assessment to identify actual and potential talent. HRD provides a framework for self-development, training programmes and career progression to meet an organisation's future skill requirements.* Shrivastava (Shrivastava, 1999), defines the integrated human resources development as *an approach to overall development that places the well-being of the people first and regards human beings as both agents as well as beneficiaries of all development efforts.*

HRD related activities seek to design, redesign and continuously upgrade the potential of human resources so that the latter continues to contribute to the process of development in a productive manner. This has to be so irrespective of any particular phase through which the national economy may be passing. The whole essence is to maximise returns to development efforts and optimise distribution of its benefits.

For the present study, the NHRDP has been defined as follows:

The National Human Resource Development Plan (NHRDP) is a policy framework for education, training programmes and career progression to meet the country's skills and competence needs; it will promote sustained economic growth by using the available human resource effectively and by drawing on their expertise and ingenuity.

Objectives of the NHRDP

1. Estimate demand for manpower in key sectors in terms of different skills/knowledge.

- Analyse the manpower situations, projecting future manpower requirements and developing manpower plans for implementation of projections. (The planning is not rigid or static; it is amenable to modification, review and adjustments in accordance with the needs of an organisation or changing circumstances. The key sectors include Tourism, Agriculture, Manufacturing, Financial Services, Education Sector/Knowledge Hub, Seafood Hub).

2. Decrease the mismatch between the demand and supply of manpower.

- Identify the areas of learning/training which will empower the citizens and which will be in line with the country's developmental process.
- Help to reduce the rate of underemployment, and to have a critical mass of human resources that can be readily absorbed by the labour market.

3. Develop proactive human resource development policies.

- Upgrade the potential of our human resources continuously so that they can contribute to the process of development in a productive manner.
- Ensure that the local workforce can achieve equivalent or better standards of productivity as compared to those in other countries.
- Develop outplacement policies and new practices to deal with the redundancy transition. Support those being exited through structured programmes.

The plan will give an idea of the likely employment opportunities that would be generated in the economy by sectors, by occupations and by educational skill categories. It will provide a basis for training and educational planning, counseling and guidance - the process of education and training being a vital one to induce manpower qualities and capabilities. It will also help to alert the government and other stakeholders to emerging manpower problems.

The successful implementation of the plan will not only allow projections of supply and demand of manpower, but, it will also contribute to:

- plan educational programmes and estimate what expansions in enrolment must be provided for in order to meet the future needs of all types of workers;
- evaluate the feasibility of launching new programmes requiring skilled personnel;
- guide the individuals in their career path; and
- develop manpower programmes and policies.

Following the recommendations of various experts, the Minister of Finance announced in the budget speech that the retirement age will gradually be raised from 60 to 65 years, both in the public and private sectors. This will be a gradual process as it will be done by adding one month to the retirement age every two months, starting August 2008 and achieving the target in 2018. The relevant legislations will be amended accordingly. As a result, this regulation will have no immediate effect on the present version of the National Human Resource Development Plan.

Methodology

The work for the NHRDP started with the recruitment of the staff of the Research Division of the HRDC in May 2005. Meetings with different stakeholders including employers from the private sector, professionals from the different Ministries and Parastatal bodies were held. Several brainstorming sessions involving members of the HRDC Sectoral Committees have been organised. Meetings were also held with the representative from Institute of Applied Manpower Research – India. The information collected was used to design the questionnaire for the survey and write the final report. The instrument was piloted before finalisation. Modified versions of the questionnaire were prepared for the Public Service and Rodrigues. In fact the questionnaire used in Rodrigues was in French. Around thirty Rodriguans were recruited to conduct the survey in August 2005. The interviewers were trained by officers of HRDC. Over ninety percent response rate was recorded in the tenth district.

In August 2005, the questionnaires were sent to around 15 000 employers in the private sector in Mauritius. The list of employers were obtained from the Central Statistical Office and from those who contribute the levy. The questionnaires were also sent to all Parastatal bodies, and to all Ministries through the Ministry of Civil Service and Administrative Reforms. The response rate varied in the different sectors. The following economic sectors are covered in the plan: Agriculture, Manufacturing, Tourism, Information & Communication Technology, Public services, Finance, Seafood hub, Education sector/Knowledge Hub and Rodrigues. Thirty interviewers were recruited

to conduct around one thousand face to face interviews in Mauritius. The data collected were analysed using SPSS®. Due to an extremely low response rate from the Public Service Sector, a second exercise was conducted in March-April 2006 with the support of Ministry of Civil Service Affairs and Administrative Reforms. The Human Resource Analysts helped in conducting the interviews.

Tyson (Tyson, 1997) suggests that *the time frame over which strategic plans are made are shortening and that the planning horizons are down to two or three years from the norm of five years in the 1970s*. The plan has been prepared for the next five years with provision for annual review and forecast. It is expected that it will be updated regularly due to the uncertainty in the business environment. Inquiry, statistical and econometric methods have been used. All forecasts are based on assumptions and limitations and this plan is not an exception. One of the important assumptions is that the future structure of the labour force can be estimated from past employment trends and the projected growth. It is also assumed that employers would know their occupational and employment needs in future years. The successful implementation of the plan requires support from a wide range of enterprises, public and private institutions. Companies need to understand that owing to acute competition they must continuously train their labour force.