



HRDC

Human Resource Development Council

Under the aegis of the Ministry of Education & Human Resources

REPORT OF SECTORAL COMMITTEE ON MANUFACTURING



November 2006

TABLE OF CONTENTS

INTRODUCTION	3
THE PRESENT AND THE FUTURE OF THE MANUFACTURING SECTOR	5
GLOBALISATION AND THE NEED FOR CHANGE	6
PAST AND PRESENT	7
HRD ISSUES OF THE MANUFACTURING SECTOR	8
WHAT ARE THE POSSIBLE SOLUTIONS?	9
DYNAMIC CHANGE PERIOD/PROCESS – EMPOWERMENT PROGRAM	10
CLUSTERING	11
INNOVATION	12
LIFE LONG LEARNING/TRAINING	12
CORPORATE SOCIAL RESPONSIBILITY	14
CONCLUDING REMARKS	15
ANNEX	17

INTRODUCTION

The Manufacturing sector is a leading sector of the Mauritian economy and shall remain so for many more years to come. Its contribution to the economic development has always been very significant as it is the:

- largest contributor to the GDP (approximately 25%); and
- largest employer and generator of employment

It is also a key player in attracting local and foreign direct investment. The Manufacturing sector has played an important role in the transformation of the Mauritian economy thus propelling it to the status of middle-income economy. It has brought positive social changes in the country. This sector can be grouped into three main components:

1. Sugar milling (5 % of Manufacturing output);
2. EPZ representing (55 % of Manufacturing output); and
3. Non-EPZ representing (40 % of manufacturing output).

At present, these three sectors are threatened. Sugar has to face reduction in price, local EPZ goods must compete with Chinese products following the elimination of MFA while non-EPZ has to progress in the era of trade liberalisation.

Table 1: Evolution in the Number of Employees in the Manufacturing Sector (exclude sugar milling)

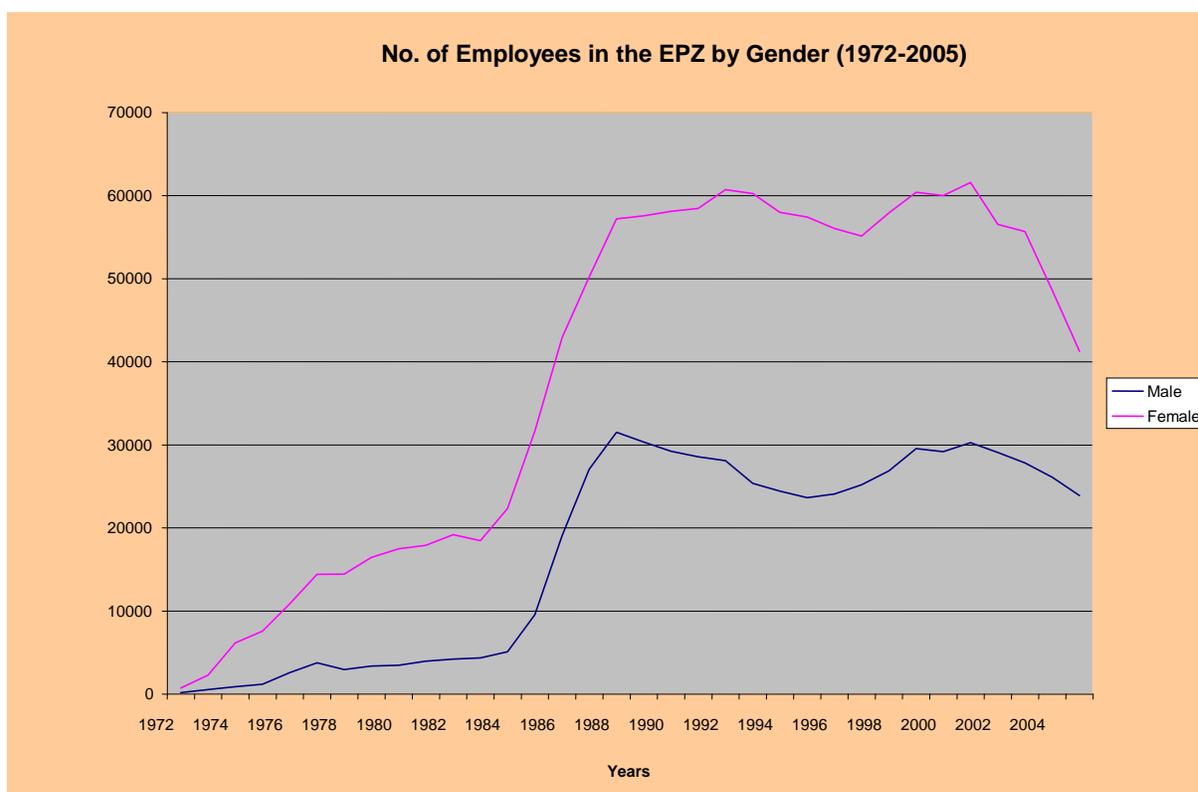
Year	Total (in 000)
1995	131.6
1996	129.3
1997	130.7
1998	137.4
1999	139.9
2000	137.2
2001	138.8
2002	135
2003	130.1
2004	123.2
2005	116.3

Source: HRDC Manpower Planning Survey (2006 – 2010)

Table 2: Evolution in the number of Employees in the Sugar Manufacturing Industry

Year	Sugar manufacture		
	Male	Female	Both sexes
1995	6,031	83	6,114
1996	4,984	55	5,039
1997	4,289	57	4,346
1998	4,038	52	4,090
1999	3,861	25	3,886
2000	3,331	27	3,358
2001	3,143	27	3,170
2002	3,035	29	3,064
2003	2,208	22	2,230
2004	2,260	22	2,282
2005	2,215	20	2,235

Source: CSO



Source: CSO Survey of Employment and Earnings in Large Establishments (employing 10 or more persons) 2005

The Sectoral Committee on Manufacturing has met twelve times since the Human Resource Development Council set it up. This report is a report on the local Manufacturing sector.

THE PRESENT AND THE FUTURE OF THE MANUFACTURING SECTOR

With all the problems looming around, the possible solutions would be to restructure the whole Manufacturing sector whereby Mauritius should concentrate on whatever it has as a competitive advantage. Gradually, there will be a need to shift towards the Services sectors like the ICT, BPO, Knowledge Hub, Medical Hub, IRS, Freeport, Shopping Paradise and Tourism. These sectors along with the Manufacturing sector will contribute further to the success of our country in the future.

But there is one very important aspect that will need to be addressed very soon. Mauritius does not have the necessary infrastructure, business facilities and trained manpower to meet the requirements of these new emerging sectors. Mauritius is currently facing the problems of high cost of labour, lack of trained personnel, high internet connectivity cost and an education system that needs to be reviewed and implemented as per the new economic requirement.

The immediate cost of shifting from the Manufacturing sector would put a strain on the employment level and social stability. Therefore the move should be gradual and planned over a period of time where adjustment should be made for re-training and re-skilling of employees.

This does not mean that the Manufacturing sector will have to be discarded completely because we cannot move to the Service sector in the short run. The sector will still employ a large proportion of the labour force but it will decline gradually. The sector needs to be restructured and resources redirected towards

potential successful fields like the Seafood Hub amongst others. Mauritius has developed know-how in textile and sugar and this expertise needs to be exploited to the maximum with the contribution of technology and innovation to make these sectors more competitive. The aim is to allow Mauritius to become a key player in the region and to exploit the niche markets.

GLOBALISATION AND THE NEED FOR CHANGE

Today the Mauritian economy is at a crossroad. Globalisation, increasing international competition together with specific changes in international conditions affecting the Manufacturing sector, especially with the erosion of preferential markets. These are forcing the Mauritian stakeholders to consider other avenues for development for the sector.

The competitiveness of the local sector must be either maintained or improved in future. The key word for everyone is change. All size of enterprises is affected. The pressure on Mauritian enterprises to match increasing competition and to meet the new demands from customers is very strong. In order to survive and prosper, manufacturers need people who can generate innovative ideas and adapt to constant changes. The shortage of skilled people can act as a limiting factor on individual organisations and on the economy as a whole. As a result, Mauritian enterprises need to go through a very dynamic change process in order to meet the skills and knowledge requirement. The following must be given due consideration if we want the sector to succeed in future:

1. Employees must be empowered so that they are better able to comply with new demands/specification from customers or markets;
2. At all levels, no efforts should be spared when it comes to add value to products and services so that they can achieve a better price and quality;
3. We should continuously learn how to improve quality or comply with quality certification procedures;

4. Additional efforts are necessary to increase productivity, lower costs or reduce wastages;
5. Technology upgrading must take place in order to produce high quality products. However, more skilled workers would be required to operate the new technology including the use of ICT; and
6. At the same time, additional measures must be taken to improve health, safety and hygiene conditions, while complying with new labour and environmental standards or regulations.

PAST AND PRESENT

Since independence, the Manufacturing sector has positioned itself as a very dynamic and dominant sector in the Mauritian economy. However, the Sectoral Committee has, during its last twelve sittings, analysed and discussed various pertinent issues justifying the present situation of this sector. This sector, which was the largest employment generator, had witnessed a decline in job creation and a change in culture. People are less motivated to join the EPZ sector for the following reasons:

- Morale and/or image building of the Manufacturing sector - over the last 5 years, the image of this sector has been stigmatised.
- Job insecurity, abrupt closure of factories and workers deprived of any form of compensation in many cases of closures;
- Time factor-disparity of working hours between EPZ and non-EPZ due to timely delivery requirement from EPZ customers. Inadequate production planning, delays in receiving raw materials and accessories, high rate of absenteeism, poor social conditions due to disparity in working hours thus limiting participation in social activities;
- Competition – The need to reduce costs, to improve productivity and to enhance quality require upgrading the level of skills and other characteristics of workers. Therefore, the workers have a tendency to join the informal sector where it is easier to earn an income in less stringent

- work conditions. Moreover long working hours and overtime do not motivate people to join the Manufacturing industries;
- Retrenched workers in this sector do not have appropriate financial support after job losses. Moreover, they are either not willing to attend training programmes or they are unable to participate in similar empowerment programmes. Age factor becomes a critical factor especially when we know that this sector always needs to train employees to satisfy the demand of the customers;
 - Lack of confidence prevailing in every sphere of the economy; and
 - Absence of media communication for the promotion of a better image for the EPZ sector. The general tendency of the media is to report solely on the adverse or negative issues.

HRD ISSUES OF THE MANUFACTURING SECTOR

This sector is facing dire labour problems. The labour force is moving away from the sector. One major problem that this sector is facing is the low level of educational attainments of employees. A vast majority of the employees have studied up to the CPE level. Moreover, the new generation of workers are reluctant to join the sector resulting in foreign labour being imported to sustain the sector. The other areas where the sector is facing problems are presented below:

- There is also the problem of re-training and re-skilling which is well behind schedule;
- High entry requirements to join the training offered by IVTB;
- Labour laws and regulations are too rigid;
- Investment is low;
- Red-tapism is common; and
- Liberalisation is affecting local industries as there are no anti-dumping laws and no Non-Trade barriers vis-à-vis the SADC and COMESA countries.

WHAT ARE THE POSSIBLE SOLUTIONS?

There is no immediate or tailor-made remedy to solve the problems in the Manufacturing sector. But the Sectoral Committee has come up with some possible solutions that may be implemented in the short run and in the long run. These include:

In the short run:

- Re-direct resources towards promising or strategic sectors where growth potential exists e.g. energy production from bagasse;
- Bring reforms to the education system to make it more appropriate to prepare future employees for new up-coming industries;
- Training through apprenticeship programmes and on-the-job training should be encouraged;
- Improve social measures and encourage participative management so as to have a less rigid labour environment. This will motivate employees while promoting innovation;
- Training should not only be for school leavers; it must also be provided to employees already working. Training should be continuous so as to meet new technological changes;
- More specific training programmes have to be developed to meet the requirements of the sector;
- On-the-job work experience should compensate for low academic qualifications when enrolling for IVTB courses;
- Mauritius needs to have a place where local manufacturing products could be displayed. This is very important as it will act as a *showcase* for foreign buyers;
- Develop meaningful re-skilling programmes for redundant workers to direct them towards the services sector or other emerging Manufacturing industries;
- Labour Services Agencies need to provide updated list for all unemployed and also new job seekers;

- Employment Services under the Ministry of Labour and Industrial Relations should have a database of acceptance or refusal of job opportunities for job seekers, redundant and unemployed; and
- Revisit trade liberalisation to ensure an equal level playing field.

In the long run:

- Review the education system and introduce new subjects like International Business and so on;
- Proper career guidance service and Manpower planning strategies are necessary to guide people towards sectors where better prospects exist in terms of employment and career development;
- The education system needs to include more vocational elements. Children should be guided at an earlier stage towards the vocational fields;
- Creation of new institutions in the fields of Construction, Seafood and so on;
- A definite shift from Manufacturing to Services sector;
- Identify and consolidate those sectors that have potential to emerge and develop thereafter. Resources should be directed towards these sectors;
- The sector should concentrate on export-oriented products. Mauritius could seek the help of foreign expertise/mentors for guidance;
- Promote Mauritian brand and the Mauritian specialities. An aggressive marketing campaign need to be carried out to enhance the reputation of Mauritian manufacturing products; and
- Aim at a gradual reduction in the workforce. However this should be accompanied by re-skilling and redeployment programmes.

DYNAMIC CHANGE PERIOD/ PROCESS – EMPOWERMENT PROGRAM

The Mauritian enterprises need to go through the 3rd phase of industrialization. This dynamic period of change will produce successful results if we are able to

decrease the shortage in the supply of skills, while reducing the mismatch between the supply of new entrants in the labour market and the demand for skilled labour from employers.

- Redundant workers should be encouraged and given the necessary support to go for multi-skilling or special skills training program. The retrenched workers can contribute immediately in the new home interior and fashion *artisanal* work for the IRS and New Hospitality Project.
- There is a need to have a national database on the qualifications, aptitudes, skills and grade of potential workers. This will help employers to consult the database to find employees with the desired skills
- There is the need to train the unemployed through the Empowerment Programme.
- The establishment of small-scale enterprise villages as in Singapore should be envisaged.
- A panel of professionals, forming a school of mentors that will act as a valuable resource team with experience in the various world of work, need to be set up. This would not only help enterprises but will promote a healthy relationship between management and the employees while contributing towards effective human resource development planning.
- As Mauritius is going through a period of dynamic change, it is important to provide work places. The setting up of small enterprise village comprising school, shopping centres, recreational activities and other amenities is essential to align the country with the period of change. Access to late night shopping and public transport facilities till dawn or 24-hr service.

CLUSTERING

Clustering of the Manufacturing sector should be highly encouraged and no effort should be spared in making the Manufacturing cluster a reality. The clusters in this sector would enable the enhancement of skilled manpower and would also promote multi skilling. There is an increasing evidence internationally that

clustering has a great relevance in reducing costs and meeting competition. Mauritius should embark in realizing this process to make the Manufacturing sector progressively effective and sustainable for the country. Enterprises cannot work in isolation as cooperation will be beneficial for the sector. The protection net that Mauritius was dependent upon and had been enjoying has now been eroded. Consequently, the local market is flooded with cheap foreign goods thus seriously jeopardizing the development of local manufacturers. Clusters in local Manufacturing are very important to make the industries efficient and competitive. The local Manufacturing work force is nearing the EPZ with about 65,000 employees.

INNOVATION

Innovation is crucial for the development and survival of the Manufacturing sector. We have to start thinking “out of the box” or think differently in terms of new products. The EPZ has to set-up its own school of design. It has to work in close collaboration with world known fashion designers in order to benefit from their expertise and thereby be constantly present and gain access over other countries to the main markets. Branding Mauritius and *Made in Mauritius* should become essential features for Mauritius. Annual business activities and enterprise week should be organized in order to sensitize people - both local and foreigners - about products manufactured. Regular meetings need to be organised at high level. This would act as *think tank* where new innovative ideas would be generated. Production in the Manufacturing sector needs to be re-oriented; enterprises have to get involved in pre and post production phase to offer better quality products. Consequently, training has to be adapted to these new requirements.

LIFE LONG LEARNING/TRAINING

The future of the Manufacturing is a matter of concern for everyone including business leaders. Our economy is based on very limited natural resources or practically none. Mauritius has achieved its economic performance thanks to its

unique assets namely its human resources. Therefore, we should continuously focus on education and life long learning thus making training a vital component. The ability to carry out practically any economic activity whether it be to operate a machine, assemble a product, supervise a workshop or provide a particular service, require learning. Learning is acquired through training carried out externally or on-the-job. The Human Resource Development Council, in its 20-point program, has emphasised a lot on training and development. The implementation of a modular training and certification in collaboration with MQA, TEC and MES is in process. Work place learning is assuming greater and greater relevance for all sizes of enterprises. This process implies both formal and informal learning that occurs at the work place. Learning from other enterprises should also become an integral process. Important knowledge about latest technologies, fashion, material, precision or quality safety and hygiene standards can be disseminated within enterprises and be spread among enterprises. Video tapes, action learning coaching and mentoring are among other methodological approaches of offering work place learning. Besides, external training is as important as work place learning. Research has shown that there are significant differences in the enterprises of varying size to engage in external training. The majority of smaller enterprises do not undertake or adopt external training program; they are often simply uninterested in ensuring that their employees are fully competent to do their jobs.

As per the World Bank report of 2002, 48 percent of our enterprises with 5-24 employees and 79 percent of those with 25-99 employees provided for off-the-job training as compared to 92 percent of those employing 200-499 employees.

The enterprises face a number of constraints pertaining to the ability of their employees to attend external training costs namely time, location and the urgent delivery requirement i.e. short lead-time from customer is a very common constraint. There is also information problem about courses, a lack of motivation or interest to engage in training as well as limited academic and educational

experience, and a lack of interest by employees to be trained. There is also a common concern of Mauritian enterprises about the possible effect of training on wage and about the possibility of losing trained workers.

One aspect that is very important and that needs to be considered is career development of employees in the sector. Training should not only be for low level employees. Training for managerial level is very important. Appropriate training need to be designed for managerial positions for each sector within the industry as managerial requirements varies across sectors.

CORPORATE SOCIAL RESPONSIBILITY

Since its beginning, the Manufacturing sector has not adopted a common policy plan related to the benefits being offered to employees. It has widely been criticized at all levels for its very poor policy towards implementation of a retirement or pension plan. Therefore, the Sectoral Committee on Manufacturing has proposed the following few measures to attract workers in this sector:

- Introduce or encourage a private and portable pension plan for employees. Enterprises should form a *pension plan cluster* where they can join in and contribute a common premium for a pension plan in addition to the compulsory one;
- Introduce a health scheme plan through EPZ Welfare Fund and leisure activities and other social considerations in order to make the Manufacturing sector more attractive;
- Encourage life insurance policy and implement same through employees/employers contribution of 60/40 or 2/3 and 1/3 as practiced by some organizations;
- Organise events like Radio Crochets, social activities, sports and intercultural activities where children and families of the workers can participate. *Kermesse* or *la foire* has to be organised to sell local products to employees at discounted rates; and

- Recognition of employees for long service award and/or distinctive employee certificate should be introduced.

CONCLUDING REMARKS

Mauritius has to live with its Manufacturing sector for at least another decade although other sectors namely Financial, Tourism and Hospitality and ICT sectors are emerging fast. The Manufacturing industries will still dominate the Mauritian economy for years to come. However, this sector is affected by many issues and some of these needs to be addressed urgently. All stakeholders have to work together, irrespective of differences, towards a common goal to ensure a brighter future for all.

The Textile sector is undergoing through a transition phase and this could offer opportunities for Mauritius to become a world class T-shirt and denim Hub. The concept of *Cité de Métiers* and different *Chambre de Métiers* should be developed.

All enterprise and business leaders believe that the *feel good factor* should prevail at all times in spite of the triple and multiple economic shocks. Ethical issues such as transparency and good governance should become part of the entrepreneurial culture. Constant and open dialogue should be maintained at employers/employees level. Democratisation of the economy and workers participation in management will drive the Manufacturing sector towards implementation of new and latest technologies of production. This will reduce the work force but increase and upgrade productivity. It is vital to have workers who can assume more responsibility and act in an autonomous way without waiting for instructions from senior officers. There is a greater need for multi-skilling. ICT skills have become more prominent due to technological changes.

- Educating the workers and work ethics should top the priority list of employers and enterprises;

- Changing economic goals and business strategies are producing a derived demand for an adequate skills and knowledge capacity. Business strategies and skills development should go hand in hand.
- There are major difficulties in recruiting people with appropriate soft and technical skills. There is a widespread shortage of soft skills in Mauritius. Specific skills are in limited supply.
- Mauritian enterprises are under pressure to add value, improve quality, and generally move up market but they are encountering problem in recruiting people who understand the need for quality and high standard.
- A medium to long term planning of the work force is a pre-requisite.
- The industry has to undergo a re-structuring where enterprises which are not competitive anymore should be phased out.
- A Textile Emergency Support Team (TEST) exercise was conducted for the EPZ sector. A similar exercise should be adapted for the Manufacturing sector.
- Local manufacturers need to concentrate and develop their own brands as this will generate higher profits as compared to copying or manufacturing under licence.
- The sector needs to concentrate on *niche markets* where better prospects exist and it is less saturated. This will require the re-training and re-skilling of workers.
- Consideration should be given for the promotion of *enterprise villages/specific village production* whereby specific village/region could specialise in the production one particular product. This concept is already being implemented in South East Asian countries. Local example can be given of the production of honey in Rodrigues and '*tente rafia*' at Brisee Verdiere.

ANNEX

The Manufacturing sector is characterized by low educational background of the majority of its employees especially in the EPZ Sector as shown in Table 3.

Table 3: Estimated number of employees aged 15 and over in the Manufacturing sector by level of education in 2004

	Nil & Below CPE	Passed CPE	Below SC	Passed SC	Passed HSC	Tertiary **	Total
Manufacturing of textiles, wearing apparel, leather products	20,200	7,400	19,200	6,700	1,400	1,200	56,100
Manufacturing (excl. man. of textiles, wearing apparel, leather products)	17,400	6,000	18,400	6,800	2,300	2,200	53,100
TOTAL	37,600	13,400	37,600	13,500	3,700	3,400	109,200

Source: CSO (2005)

The number of employees in the Manufacturing sector did not follow a particular trend since 1995. The total number of employed persons in 2003-2004 reached around 130 000. As per estimates of the HRDC Manpower Planning Survey 2006-2010, the number of employees in the Manufacturing sector would decrease to reach about 88 900 by 2010. The estimates were based on existing trends. However, this sector is expected to witness an increase in the number of self-employed especially with the new *Empowerment Program* being currently implemented as a five year planning for employment generation. Table 4 shows an estimate of the number of employees that would be required for the sector classified according to their occupational groups.

Table 4: Estimated number of employees in thousands for the Manufacturing sector 2004 – 2010

	YEAR					
	04/05	05/06	06/07	07/08	08/09	09/10
Senior Official and Managers	5.04	4.74	4.45	4.1	3.61	3.42
Professionals	2.08	1.72	1.92	1.91	1.33	1.3
Technicians and Associate Professionals	4.8	4.27	3.77	3.65	3.22	3.15
Clerks	7.66	7.61	6.82	4.83	4.35	4.1
Service Workers and Sales Workers	5.74	4.14	4.03	4.29	2.13	2.00
Skilled Agricultural and Fisheries Workers	3.25	0.97	1.00	0.97	0.95	0.9
Craft and Related Trade Workers	19.22	19.05	19.41	19.22	19.15	17.58
Plant and Machine Operators & Assemblers	33.45	37.67	36.72	33.25	32.56	30.9
Elementary Occupations	35.04	31.39	27.15	28.03	27.29	25.53
Total	116.3	111.6	105.3	100.3	94.6	88.9

Source: HRDC Manpower Planning Survey 2006-2010