INDUSTRIAL POLICY AND STRATEGIC PLAN FOR MAURITIUS 2020-2025

Revitalising Mauritius' Economic Growth

Ministry of Industrial Development,
SMEs and Cooperatives (Industrial Development Division)

UNITED NATIONS
UNCTAD

TABLE OF CONTENTS

Report prepared by: Prof. Justin Barnes, Chairman of Benchmarking and Manufacturing Analysts (Pty) Ltd, Executive Director of Toyota Wessels Institute for Manufacturing Studies and Associate Professor at the Gordon Institute of Business Science, University of Pretoria.

Courtesy photo cover page: AfzNoor

Design and Conception: National Productivity and Competitiveness Council

TABLE OF CONTENTS

A globally competitive and sustainable industrial sector that contributes to higher economic growth for Mauritius through continuous innovation, technology upgrading, productivity gains and high skilled employment.

MESSAGE
BY HONOURABLE MINISTER

MESSAGE BY HONOURABLE MINISTER

Honourable Soomilduth Bholah

Minister of Industrial Development, SMEs and Cooperatives

I am immensely pleased to launch the Industrial Policy and Strategic Plan (2020-2025), which comes at a highly opportune time, particularly when the manufacturing sector is celebrating its fiftieth anniversary this year. Over this journey, the manufacturing sector has been the main engine of economic growth as evidenced by its substantial contribution to Gross Value Addition, total employment and foreign exchange earnings. During the past year, it accounted for 12.5% to Gross Value Addition and 17% to total employment. Nonetheless, it is widely recognised that today the manufacturing sector is standing at a critical juncture and a set of novel industrial policies and strategies is warranted to ensure that the sector sustains its momentum and increase its resilience amidst the backdrop of emerging and unpredicted challenges associated also with the outbreak of Covid -19.

Indeed, the manufacturing sector has undergone several successive phases of structural transformation owing to the various industrial policies adopted by the country in the past. It started in the sixties with an import-substitution policy followed later by an export-led strategy. The competitiveness of our manufacturing sector was centered mainly around trade preferences and the availability of low-cost labour. However, we are currently at the dawn of a new era which hinges on new imperatives such as the use of intelligent and lean production systems embedding digitalisation, eco-friendly and fair-trade practices, product quality, branding, research and development and innovation, supplemented by a versatile and high-skilled labour force.

No doubt, the sustainability of the manufacturing sector rests on these predominant factors which are now dictating the very competitiveness and survival of our enterprises.

The Industrial Policy and Strategic Plan (2020-2025), which has been elaborated with the assistance of the United Nations Conference on Trade & Development (UNCTAD) proposes a policy framework that should be implemented to bring about transformational changes for a globally competitive and sustainable manufacturing sector. It focuses on the creation of a solid industrial foundation based on the availability of a technically qualified labour force to service the manufacturing base and an enhancement in our soft and hard infrastructure. The policy framework also supports the drive to diversify our products and production processes with the adoption of high-end technology, promotes local production, and provides a lead on how to boost regional and global exports. The new Industrial Policy and Strategic Plan comprises different policies that will have to be implemented in the coming years. We have to ensure that a paradigm shift towards elevated growth rates takes place.

I would like to emphasise that the preparation of this Strategic Plan has benefitted from the collaborative efforts of key Ministries as well as various public and private sector organisations. It is, undoubtedly, a shining example of cooperation between the Government and its partners. It endorses my belief that together we can make a difference and achieve more. I am confident that this privileged relationship will prevail during the implementation phase of the proposed strategies in the Report and will yield concrete results.

I am thankful to UNCTAD for its continued assistance in the future Monitoring and Evaluation exercise which would ensure that we are treading on the right path for a re-dynamised and vibrant manufacturing sector contributing towards enhanced economic prosperity.

MESSAGE FROM UNCTAD

MESSAGE FROM UNCTAD

Richard Kozul-Wright
Director of UNCTAD's
Globalization and Development Strategies Division

Virtually all of today's industrial economies have completed their journey from widespread rural poverty to post-industrial wealth employing, all along their development trajectory, policies designed to shift the production structure towards new types of activities and sectors with progressively higher productivity, better paid jobs and a greater upgrading potential. Such policies are conventionally called industrial policies.

Market forces left alone cannot drive the process of structural transformation and sustain economic growth; rather, they risk specialisation in low-productivity and low-value-adding economic activities. This is all the more-true in the current economic context of (hyper) globalisation, where a combination of footloose capital, new technologies and unregulated markets are generating unprecedented levels of concentration at the global level, while developing economies with limited productive capacities run the risk of remaining trapped in, and competing for, activities at the bottom of value chains, which ultimately result in "thin industrialisation", and in some cases premature deindustrialisation, and slow economic growth. In such an interdependent but uneven world economy where earlier industrialisers have already accumulated a significant stock of capital and capabilities (at the human, firm and social levels) that give their producers significant cost and productivity advantages in both domestic and international markets, industrial policies with a medium- and long term horizon aimed at closing these multiple gaps are more important than ever.

The Covid-19 has amplified these disparities and dramatically exposed the fragility of many developing economies. Unsustainable levels of debt are one immediate source of fragility. Reshoring, which might widen even more the cross-country distribution of income, is likely to be accelerated by Covid-19, as it allows for more flexible adjustment to changing demand, mitigating firms' risks in the event of a pandemic or other shock. Furthermore, supply chain and travel disruptions caused by Covid-19 might undermine economic integration and encourage more self-sufficient production systems, at least in strategic sectors such as medical equipment and drugs, or the production of inputs for assembling sophisticated machines, the final production of which still occurs in high-wage countries.

In such a difficult historical juncture, Mauritius finds itself at a critical crossroad. The country represents one of the most successful experiences on the African continent; its growth has been spectacular, averaging five per cent over the last four decades. Mauritius also managed to diversify away from sugar cane production and has transformed itself from a predominantly low-income mono-crop economy to an upper middle-income/ high income economy with growing manufacturing, agroindustry, financial, ICT and tourism sectors.

However, the country is still facing important challenges. Preferential access erosion and heightened international competition are leading to a progressive loss of competitiveness in its manufacturing sector whose share of GDP almost halved since the turn of the millennium. Traditional markets such as those in Europe and the United States remain overwhelmingly important while trade and transport costs and limited connectivity create barriers for Mauritius-based manufacturing firms to supply regional markets in a cost-effective way and deficiency in technological uptake, particularly among small and medium-sized enterprises, impinges on the ability to manufacture precision-driven and high-end products. These difficulties are inevitably slowing-down the transition towards an innovation-driven economy and put at risk the potential benefits of the new information and communication technologies (ICTs) which are defining the fourth industrial revolution and entirely reshaping the organisation of production in several sectors.

In this context, adopting a set of policy measures tailored to local conditions and capabilities is more important (and urgent) than ever. This is why the United Nations Conference on Trade and Development, in the framework of its quinquennial policy support activity in Southern Africa, has partnered with the Government of Mauritius in its effort to renew the toolset at its disposal to revitalise industrial development and economic growth. Now that the tools are there and the foundations for the next quinquennium have been laid down, implementation is the next challenge ahead.

FOREWORD

FOREWORD

Mrs Bibi Fatwma Abdool Raman Ahmed
Permanent Secretary

The formulation of this Industrial Policy and Strategic Plan (2020-2025) has been realised with the financial and technical assistance of the United Nations Conference on Trade and Development (UNCTAD). The Ministry would like to express its appreciation to Mr. Piergiuseppe Fortunato of UNCTAD, the Project Leader, for his expert guidance and coordination efforts in the successful concretisation of this Report. We are particularly grateful to Professor Justin Barnes, the International Consultant, for having charted out clear strategic orientations and directions to ensure sustained industrial development in the country over the next five years.

The Ministry would also like to place on record the well-esteemed collaboration of the Core Team Members, comprising representatives of relevant public and private sector institutions, namely, the SME and Cooperatives Divisions, the Economic Development Board, the Mauritius Export Association, Business Mauritius, the Mauritius Chamber of Commerce and Industry and the Association of Mauritian Manufacturers, which provided valuable insights all along the preparation and validation of the Industrial Policy and Strategic Plan.

We are also indebted to the representatives of various public and private sector organisations, enterprises and Captains of Industry who have taken time out of their busy schedules to share with us their perspectives, philosophies and ideals for a revamped manufacturing base and for the finalisation of the Action Plans.

The elaboration of this document would have been a near impossible feat without the commitment and support displayed by diligent staff members of the Ministry and whom I wish to acknowledge personally, namely, Mr. A. Paul (Director of Industry), Dr. R. Domun (Principal Analyst), Mrs. K. Manna (Senior Analyst), Mrs. Z. Mandarun (Ag. Senior Analyst) and Mr. A. Seedoyal (Analyst).

Last, but not the least, our profound appreciation is conveyed to the Honourable Soomilduth Bholah, Minister of Industrial Development, SMEs and Cooperatives for his exceptional dedication to support the cause of industrial development and for his continuous collaboration which has been instrumental in the preparation of this Report.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This Industrial Policy and Strategic Plan contains a wide range of recommendations to support the continued growth and development of Mauritius' industrial capacity and capabilities. These recommendations are intended to support the realisation of Mauritius' bold national 2030 vision, which is the achievement of high-income status, supported by a highly productive manufacturing sector contributing a quarter of the country's GDP. Stemming from a comprehensive stakeholder consultation process, and independent analysis of Mauritian manufacturing capabilities, the working vision and associated set of objectives that have been defined for the Mauritian manufacturing sector through to 2030 are presented in Table 1.

Table 1: Summary of industrial policy vision and associated objectives to 2030

Vision	Objectives to 2030
A globally competitive and sustainable industrial sector that contributes to higher economic growth for Mauritius through continuous innovation, technology upgrading, productivity gains and high skilled employment.	1. Increase manufacturing GVA from $1.6 billion in 2018 to $3.6 billion
	2. Manufacturing to grow at a CAGR of 6.79% (from 2018 to 2030) to ensure it contributes 25% of GDP
	3. Improve sector productivity by an annual 3.87% to sustain the economy's structural transformation in the high-income status
	4. Increase manufacturing employment from 103,411 in 2018 to 146,122

Achieving the vision and its associated objectives will require a bold institutional approach to Mauritius' industrial policy development and deployment. The primary recommendation that takes precedence over the balance of recommendations made, is, therefore, the establishment of an Industrial Policy Executive Oversight Committee that reports to the Ministry of Industrial Development, SMEs and Cooperatives, and that is responsible for monitoring and evaluating the realisation of the strategy over its lifespan.

The 22 recommendations made are summarised in Table 2, which also groups recommendations as either coordination, infrastructure or incentive based. In certain instances, a specific recommendation is both coordination and infrastructure based. This occurs where a recommendation requires an investigation before appropriate infrastructure can be established. Infrastructure and coordination recommendations do not have indicative budgets, with the expectation that they are covered under an existing budget that may need to be amended or revised to accommodate the proposed interventions.

The objectives articulated in Table 1 should be the guiding framework when analysing the impact of the various recommendations. Where the recommended infrastructure, coordination interventions, and incentives are clearly delivering on the growth rates required and represent demonstrated value to both the government and private sector they should potentially be expanded; and where they are falling short, it is essential that they are reviewed, and either remedied or replaced. As comprehensively documented in this report, Mauritius is at a structural crossroads. If manufacturing and the broader industrial sector are central to the national project of sustaining high income status by 2030, an innovative, well resourced, and carefully monitored industrial policy is required.

EXECUTIVE SUMMARY

Table 2: Summary of Industrial Policy recommendations

Focus area	Recommendation		Type	Budget impact
Industry Foundations	1.	Establish a manufacturing sector skills development roadmap	Coordination	Funding for roadmap
	2.	Develop an expatriate permit expediting process allowing firms to respond to rapid market demand shifts	Coordination	Resourcing of expediting process
	3.	Develop a labour market flexibility framework that enhances the ability of manufacturers to adjust their capacity to market shifts	Coordination	None. Stakeholder engagement process
	4.	Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement	Coordination; infrastructure	Funding of accreditation capacity
	5.	Develop a digital roadmap for priority manufacturing sub-sectors and ensure digital infrastructure is in place for evolving business models	Coordination	Funding for roadmap; and infrastructure gaps
	6.	Review the standard of industrial estates; and advance standards to those of leading industrial estates globally	Coordination; infrastructure	Resources for upgrading industrial estates
	7.	Review port operations and align costs and performance standards with leading merchandise ports internationally	Coordination	None. Engagement process with port
Upgrading of Value Chains	8.	Establish a Manufacturing Upgrading Fund (MUF)	Incentive	Rs 1.9 billion over 5 years
	9.	Establish a Modernisation Investment Support Fund (MISF)	Incentive	Rs 4.4 billion to 2025; Rs 9.6 billion to 2030
	10.	Establish a Technology Innovation Incentive (TII)	Incentive	Lost income tax
Increased domestic market supply	11.	Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production	Coordination	Resourcing of certification capacity
	12.	Mauritian Competition Authority to monitor supermarket chain purchases; and respond to monopsonic trade practices	Coordination	None. Stakeholder engagement process
	13.	Government to engage with supermarkets on supporting local production, and the private sector's Made in Moris label	Coordination	Stakeholder engagement; Made in Moris label support
	14.	Government to investigate local procurement designation of selected locally manufactured products	Coordination	None. Government coordination only
	15.	Review Mauritius' M&E of PTAs, and establish remediation processes that protect local manufacturers during investigations	Coordination	Resourcing of PTA M&E & remediation process
	16.	Explore potential domestic manufacturing servicification models, and develop market regulations that advantage these models	Coordination	Potentially substantial – but exploration dependent
Regional & global export growth	17.	Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets	Coordination, infrastructure	Resourcing of selected warehousing
	18.	Government to explore the provision of discounted export credit guarantees to support risky market search activities in SSA markets	Coordination	Resourcing of credit guarantee discounts
	19.	Target the development of regional value chains for selected manufacturing sub-sectors, including clothing and textiles, food processing, medical instruments, and jewellery.	Coordination	Resourcing of regional engagements
	20.	Negotiate continued market access advantages into the EU, US, and extend to Australasia	Coordination	None
	21.	Explore the establishment of cost-effective warehousing in key developed economy markets to aid SME supply into these markets	Coordination, infrastructure	Resourcing of selected warehousing
Advanced technology absorption	22.	Establish a formal institutional process to explore Mauritian and regional cyber-physical platform development opportunities; and link these opportunities to established upgrading incentives	Coordination	None. Link to incentives

The Industrial Policy and Strategic Plan contains a wide range of recommendations to support the continued growth and development of Mauritius' industrial capacity and capabilities.

LIST OF ACRONYMS

AGOA	African Growth and Opportunities Act
AMM	Association of Mauritian Manufacturers
CAGR	Compounded Annual Growth Rate
CCM	Competition Commission of Mauritius
COMESA	Common Market of East and Southern Africa
EAC	East African Community
EDB	Economic Development Board
EU	European Union
FDI	Fashion and Design Institute
FMCG	Fast Moving Consumer Good
GDP	Gross Domestic Product
GNI	Gross National Income
GVA	Gross Value Added
GVC	Global Value Chain
HRDC	Human Resource Development Council
HS	Harmonised System
ICT	Information and Communication Technologies
IOC	Indian Ocean Commission
IIOT	Industrial Internet of Things
IOT	Internet of Things
IP-EOC	Industrial Policy Executive Oversight Committee
ITD	International Trade Division
JAC	Jewellery Advisory Council
M&E	Monitoring and Evaluation
MAURITAS	Mauritius Accredidation Services
MCCI	Mauritius Chamber of Commerce and Industry
MEPU	Ministry of Energy and Public Utilities
MEXA	Mauritius Export Association
MISF	Manufacturing Investment Support Fund
MOAIFS	Ministry of Agro Processing and Food Security
MOBEMRFS	Ministry of Blue Economy, Marine Resources, Fisheries and Shipping
MOCCP	Ministry of Commerce and Consumer Protection
MOESWMCC	Ministry of Environment, Solid Waste Management and Climate Change
MOFEPD	Ministry of Finance, Economic Planning and Development
MOFARIIT	Ministry of Foreign Affairs, Regional Integration and International Trade
MOH	Ministry of Health and Wellness
MOIDSC	Ministry of Industrial Development, SMEs and Cooperatives
MOITCI	Ministry of Information Technology, Communication and Innovation
MOLHRDT	Ministry of Labour, Human Resource Development and Training
MPA	Mauritius Ports Authority
MRA	Mauritius Revenue Authority
MQA	Mauritius Qualification Authority
MRIC	Mauritius Research and Innovation Council
MSB	Mauritius Standards Bureau
MUF	Manufacturing Upgrading Fund
MVA	Manufacturing Value Added
NDP	National Development Plan
NPCC	National Productivity and Competitiveness Council
PPO	Procurement Policy Office
PTA	Preferential Trade Agreement
RCA	Revealed Comparative Advantage
ROO	Rules of Origin
RVC	Regional Value Chain
SADC	Southern African Development Community
SIDS	Small Island Developing State
SME	Small and Medium Enterprises
SMEML	SME Mauritius Ltd
STEM	Science, Technology, Engineering and Mathematics
TII	Technology Innovation Incentive
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations International Development Organisation
WTO	World Trade Organisation

LIST OF FIGURES

LIST OF TABLES

LIST OF BOXES

INTRODUCTION

INTRODUCTION

Mauritius is a paragon of success within the Indian Ocean Commission and Sub-Saharan Africa more broadly. Notwithstanding severe resource limitations and locational disadvantages, the country has experienced consistent economic growth since independence. This positive trajectory has been maintained, at least until the advent of the Covid-19 pandemic. Mauritius' per capita Gross National Income (GNI) of US$12,050 in 2018 was 133% higher than it was in 2004 (World Bank, 2019), positioning the country as one of the wealthiest within the African Union. This significant income growth has been accompanied by major social gains, inclusive of infrastructure improvements, the provision of generous welfare benefits, and the establishment of a comprehensive and free education system. Mauritius is consequently widely acknowledged as being the most stable and democratic country within the African Union[1].

While Mauritius' development successes should be lauded, its manufacturing sector has struggled over the last decade. This is evident in respect of Mauritian manufacturing value addition, trade performance, employment, investment, and productivity trends. The data, which is unpacked in more detail in Appendix A, is broadly suggestive of stasis. Mauritian manufacturing sector Gross Value Added (GVA) in has remained range bound between US$ 1.5 billion and US$ 1.8 billion since 2008, with 2018 levels firmly within this range at US$1.65 billion. This should be of major concern to all Mauritian stakeholders as manufacturing has historically been the "engine room" of Mauritius' economic growth and social development.

Recent economic growth in Mauritius has been driven by the growth of the financial and retail sectors, as well as government expenditure and broader domestic market consumption. This is widely recognised in recent government commissioned reports. While these are not in and of themselves negative developments, it is questionable whether these sectors have the potential to continue driving Mauritius' socio-economic development, especially when considering its National Vision for 2030, which includes a range of noble social and economic objectives, including a strong economy; open country; coherent social policies, and inclusion; a safer living environment for all and a higher quality of life; and sustainable development. Core to the National Vision for 2030 is achieving high income status. To do this Mauritius needs to sustain a compounded annual per capita income growth rate of 3.87% per annum for the period 2018 to 2030 – thereby achieving a GNI per capita of US$19,000.

Whether Mauritius can achieve these objectives and this ambitious per capita income level without a revitalised manufacturing (and broader industrial) sector is questionable. Evidence from UNIDO's 2013 Industrial Development Report is instructive in this regard. As highlighted in the UNIDO report, manufacturing is not only key to value and employment creation within economies, it is also the primary driver of productivity growth across economies with per capita incomes below US$15,000. It is only at high incomes of above US$17,000 that services, non-manufacturing industry, and manufacturing productivity converge. This emphasises the primacy of manufacturing to productivity growth (UNIDO, 2013: 6), which is the major challenge facing most middle-income economies, including Mauritius.

Given its objective, this report comprises six chapters.

- Chapter 1 explains the methodology used for the project, including an overview of the stakeholder engagement process completed as part of the two missions.
- Chapter 2 summarises the present position of the Mauritian manufacturing, and broader industrial, sector. This section is based on both primary and secondary research, including findings from the extensive stakeholder engagements.
- Chapter 3 articulates the key strategic lens through which the 2025 industrial policy and action plan has been developed. Based on the Section 2 findings, it emphasises the key inhibitors and opportunities likely to frame the sector's development potential.
- Chapter 4 encompasses the industrial policy recommendations that have been identified to guide the development of Mauritius' manufacturing, and broader industrial, sector to 2025 (and beyond). This section represents the report's core value, and comprises five sub-sections, each focusing on a critical Mauritian industrial policy dimension.
- Chapter 5 complements the main industrial policy framework by completing a set of Diagnoses and Strategies for key manufacturing sub-sector
- Chapter 6 summarises the recommendations made and concludes the report.

The report also contains five important appendices. Rather than overly complicating the main sections, additional supporting tables and figures are located within the appendices. Appendix A details the recent performance of the manufacturing and broader industrial sector in Mauritius; Appendix B unpacks the wide swathe of regional trade opportunities identified, and Appendix C reflects on Mauritius' existing suite of incentives for the industrial sector. Appendix D provides details of the sector-specific action plans that emerge from the broader industrial policy recommendations made.

1 This is evident in respect of various global rankings, including the World Bank's Doing Business ranking (2019), the Global Competitiveness Index (2018-2019), the Mo Ibrahim Index of African Governance (2018), the Fraser Institute's 2018 Economic Freedom ranking, Forbes' 2019 Survey of Best Countries for Business, and the Economist Intelligence Unit's Democracy Index (2017). For each of these, Mauritius is ranked 1st in Africa.

CHAPTER 1
METHODOLOGY

CHAPTER 1

1. METHODOLOGY

1.1. PROJECT FRAMEWORK

The industrial policy development process comprised two field missions to Mauritius, as well as extensive data analysis, and the completion of a comprehensive literature review. The project was initiated in November 2019 and will be finalised later in 2020 once stakeholders have had the opportunity to engage with this draft report.

The stakeholder engagement process has been adjusted to accommodate the structures of the Covid-19 pandemic, and this is likely to continue through to the completion of the project. The two field trips to Mauritius were completed over the periods 1 to 4 December 2019 and 23 February to 4 March 2020. The individual stakeholder meetings and firm level visits that were completed over the course of these two missions are presented in Table 3 below (Full list at Appendix E).

Table 3: List of interviewed stakeholders and firms

Stakeholder	Organisation	Representative	Position
Firms	Archemics Ltd	Olivier Maujean	GM Operations
		Yannick Doger De Speville	Business Development
		Jean Marc Juhel	GM Distribution
	Aremo Ltd	Philip Götze	Director
	Chamarel	Herbert Couacaud	Director
	Moroil (Mauritius Oil Refineries Ltd)	André Espitalier Noël	MD
		Ravish Musruck	Process Manager
		Rehaz Sayed Hassen	Finance Manager
	Natec Medical	Stefan LeFevre	COO
		Yoel Attias	CFO
	FMM (Ferme Marine De Mahebourg)	Pierre-Yves Semaesse	CAO
	Mopirove Ltd	Abhishek Cheekhooree	Operations Director
		Sunjay M. Cheekhooree	Chairman & MD
	Banker Shoes	Perumal Sinnappan	Director
	Ferney Spinning Mills	Mohammad Reshad Moosun	Operations Manager
		Khalid Hansrod	Marketing Executive
	T&T International Foods	Ian Fook	Director
	Oxenham	Sylvan Oxenham	CFO
	Plaspak Group	Mounesh Mareachealee	Executive Chairman
	Plastic Industry Ltd	Eric Corson	MD
	Princes Tuna	Abdulla Doomun	Managing Director
	RT Knits	Kendall Tang	CEO
	Vygon	Georges Wong	Plant Manager
Public sector agencies	MOFEPD	Mrs. P. Rojoa	Lead Analyst
	SME Division	Mr. D. Conhye	DPS
	Cooperatives Division	Mrs S. Vencatachellum	Cooperative Development Officer
	SME Mauritius	Mr. R. Rampersad	CEO
	Landscope Mauritius	N. Hanoomanjee	CEO
	Investment Support Programme	Suryadev Beedasy	COO
	MITD	Pradeep Kumar Joosery	Director
	Economic Development Board	Geerish Bucktowonsing	Head: Manufacturing
		Sanroy Seechurn	Manager
		Randhir Guirdharry	Senior Professional
	MSB	Mr. M.Yousouf Foondun	Deputy Director
	MRIC	Mrs P. Veer- Ramjeawon	Research Coordinator
	HRDC	Mrs. Tehjal Vaghjee- Rajiah	Senior Research and Development Officer
	NPCC	Dev Appalswamy	Director
		Hemlata Ramsohok	Lead Research & Knowledge Management
Private sector agencies	Business Mauritius	Daden Venkatasawmy	Head: Collaborative Economic Development
	MEXA	Mrs. L. Rajmun-Joosery	Director
	MCCI	Anjana Khemraz-Chikhuri	Deputy Registrar of MARC
		Sylvan Oxenham	President
	AMM	Bruno Dubarry	CEO

CHAPTER 1
METHODOLOGY

1.2. MAURITIUS' INDUSTRIAL LANDSCAPE [2]

Before presenting the study findings, it is important to first lay out the Mauritian industrial landscape, which has been shaped by 50 years of industrialisation. According to Statistics Mauritius (Digest of Industrial Statistics, 2018), the Industrial Sector comprises industrial activities falling within divisions 05 to 39 of the National Standard Industrial Classification (NSIC) Rev.2. This is based on the UN International Standard Industrial Classification (ISIC) Rev.4 of all Economic Activities. The sections and divisions of the Mauritian industrial sector are summarised in Table 4.

Table 4: Definition of the industrial (and manufacturing) sector in Mauritius

Section	Division	Description
B	05 – 09	Mining and quarrying
C	10 – 33	Manufacturing
D	35	Electricity, gas, steam, and air conditioning supply
E	36 – 39	Water supply; sewerage, waste management and remediation activities

Based on the above definition, the structure of the Manufacturing sector in Mauritius has traditionally included Export-Oriented Enterprises (EOEs), which were formerly firms within defined Export Processing Zones (EPZs), Domestic Oriented Enterprises (DOEs), and Small and Medium Enterprises (SMEs), but excluding sugar milling.

Per the categorisation presented in Table 4, the Mauritian manufacturing sector comprised 810 large establishments (employing more than 10 persons each) and around 13,000 small establishments (employing less than 10 persons each) at the end of December 2019. This distinction of large and small firms is not aligned with any standard international categorisation. As an example, the European Union only considers firms to be large when they have more than 250 employees.

1.2.1. Export Oriented Enterprises

The Export Oriented Enterprises (EOE) sub-sector had 239 enterprises (both large and small) at the end of December 2019. EOEs produce a relatively narrow range of products, with clothing and textiles accounting for about 65% of total exports, followed by fish and fish preparations (20%) and jewellery and processed diamonds (6%). The sector has experienced limited diversification over the past decade, including the production of medical devices and high precision engineering plastic products.

The EOE sector is no longer regulated by the EPZ Act, which has been repealed. No EPZ certificates are consequently being granted to any enterprise involved in export activities. Though the EPZ legal regime has been repealed some terms are still used to distinguish exporting companies from non-exporting ones. The most notable difference relates to remuneration provisions and the extension of incentives for the recruitment of expatriates for EOEs relative to non-EOEs.

A unit of Statistics Mauritius, posted at the Ministry of Industrial Development, SMEs and Cooperatives, maintains a list of EOEs and publishes on a quarterly basis a document specific to EOEs. However, no new entries are being registered, as is evident from recent records.

This is an institutional issue that will need to be resolved, as highlighted in the recommendations section of the report.

1.2.2. Domestic Oriented Enterprises

Domestic Oriented Enterprises (DOEs) comprise 360 large establishments and produce a more diversified range of products than EOEs, with 11 major product groups represented. DOEs account for 8.3% of GDP and employ 19,837 persons. This category of firms essentially caters for the local market with some exports destined for regional markets. The sub-sector faces the challenge of trade liberalisation within SADC and COMESA, as well as domestic tariff reforms undertaken since 2005. Over the past few years, the sub-sector appears to have exhibited more dynamism than the EOE sector. However, figures on DOEs are published annually and there is no proper monitoring exercise, as is done on a quarterly basis for the EOEs. There is also no authority which registers such organisations and provides them the status of a DOE. This is another institutional weakness.

2 Data for 2019 and 2020 presented in this sub-section has been provided by the Ministry of Industrial Development, SMEs and Cooperatives.

CHAPTER 1
METHODOLOGY

1.2.3. SMEs

SMEs have emerged as an important segment within the industrial sector, contributing significantly to employment, economic output, and the development of entrepreneurship. The broader SME sector (including services) comprises about 138,600 establishments and employs some 284,574 workers. As such, the broader SME sector accounts for a considerable portion of Mauritian GDP, with the census of small establishments released in 2018 estimating a 40% contribution.

According to new Mauritian legislation, turnover-based definitions for small and medium enterprises are less than Rs 10 million for a small enterprise, and Rs 10 million to Rs 50 million for a medium enterprise. However, Statistics Mauritius, which is the official repository of national statistics defines small firms as employing less than 10 persons, and large firms as employing more than 10 persons. It is important that this confusion is addressed to allow for the proper use of data for SMEs. There is moreover a major limitation in the publication of SME data. The last official data was published in 2013 (Digest of Business Statistics, 2013), making it difficult to interpret manufacturing trends relating specifically to Mauritian SMEs.

1.2.4. MMEs as a new category of enterprises

In the Budget Speech, 2019-2020, the Government of Mauritius recognised a new grouping of enterprises. Again, based on turnover, the government recognised Mid-Market Enterprises (MMEs) as a distinct set of firms with an annual turnover between Rs 50 million and Rs 250 million. The inclusion of this definition was deemed important when deciding on the size of enterprises that require government assistance. Again, it is important to emphasise that Mauritian categorisations of firm-size are discordant with international categorisations. While they may be congruent with the small size of the Mauritian economy, their value as manufacturing categorisations, especially when Mauritian manufacturers are competing with global competitors, is questionable.

1.3. THE MAURITIAN MANUFACTURING SECTOR AND COVID 19

While the statistics and fieldwork findings presented in this report have been meticulously compiled and cross-referenced for accuracy, it is important to emphasise that the outbreak of the COVID-19 global pandemic has created significant disruption for the Mauritian manufacturing and broader industrial sector. The pandemic will have a profound impact on the Mauritian economy, and the Mauritian manufacturing sector is not expected to be spared from the unfolding crisis. Production stoppages because of confinement, order losses, and other supply chain disruptions will take a severe toll on the sector. Production is likely to decline significantly over the period of the crisis. The clothing and textiles sector, which accounts for the bulk of Mauritius' export revenue has experienced a drastic and protracted decrease in orders due to the closure of major global retail brands and a crisis in global consumer confidence that has impacted the consumption of discretionary goods. More positively, sub-sectors such as fish and fish preparations and medical devices appear to have suffered less severe market disruptions, but these are small contributors relative to the clothing and textiles industry.

One positive phenomenon which has emerged over the course of the crisis is the way many manufacturers reorganised themselves to support urgent Mauritian social requirements. This has included the production of facemasks, sanitisers, and face shields during the lockdown period.

The Covid-19 pandemic has demonstrated the importance of economies such as Mauritius having a strong manufacturing base which can support the demand for essential products and to ensure food and social security. As other countries restricted trade and limited the movement of their populations in response to the pandemic, Mauritius appears to have been able to navigate its isolation by relying on local manufacturing enterprises for a stable supply of basic commodity products such as flour, canned foodstuffs, edible oil, margarine and sanitary items. This is an important consideration and has been factored into the recommendations made in this report. In addition, the Budget, 2020-21, introduced a range of new measures to further stimulate local production.

CHAPTER 2

REVIEW OF MAURITIAN MANUFACTURING SECTOR PERFORMANCE

Courtesy: Integrity

CHAPTER 2

2. REVIEW OF MAURITIAN MANUFACTURING SECTOR PERFORMANCE

2.1. MANUFACTURING SECTOR IN CONTEXT

As an island state of only 1.3 million inhabitants, Mauritius has undergone a remarkable economic transformation since its independence in 1968. It has transitioned from a low-income, agriculturally based economy to a diversified, upper middle-income economy with substantial manufacturing, financial, ICT and tourism sectors. This transition has been underpinned by robust economic growth over the last fifty years, with real GDP growing at an average of 4.7% over the period 1968 to 2017.

The present structure of the Mauritian economy is presented in Table 5, along with an overview of changes since 2010. As highlighted, Mauritian GDP grew 3.8% in 2018, with this driven by growth in the construction and services sectors (primarily tourism, banking, and ICT). As further highlighted, the contribution of manufacturing and agriculture has slowly declined, along with output in the historically dominant sugar sector.

Table 5: Share of main sectors in the Mauritian economy, 2010 to 2019 (%)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agriculture	4.1	4.2	4.1	3.8	3.7	3.6	3.6	3.5	3.2	3.3
Manufacturing	15.9	15.7	15.5	15.7	15.3	14.7	14.0	13.4	12.9	12.5
Sugar	*0.3*	*0.3*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*	*0.1*
Food, excl. Sugar	*5.3*	*5.2*	*5.6*	*5.4*	*5.4*	*5.1*	*4.9*	*4.8*	*4.6*	*4.5*
Clothing and Textiles	*5.0*	*4.9*	*4.7*	*4.7*	*4.6*	*4.6*	*4.1*	*3.9*	*3.6*	*3.4*
Other	*5.3*	*5.3*	*4.9*	*5.2*	*5.1*	*4.8*	*4.7*	*4.6*	*4.6*	*4.5*
Electricity, gas, etc	1.8	1.6	1.4	1.4	1.6	1.9	2.2	1.7	1.7	1.6
Water supply, sewerage, etc	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Construction	6.8	6.5	6.2	5.4	4.8	4.4	4.2	4.3	4.7	5.0
Wholesale & retail trade	11.3	11.3	11.7	11.8	11.9	12.0	11.9	12.2	12.4	12.5
Transportation and storage	6.1	6.2	6.0	6.0	6.1	6.2	6.3	6.4	6.4	6.5
Accommodation and food service activities	6.8	6.9	6.9	6.0	6.2	6.5	6.9	7.2	7.3	6.9
Information and communication	4.9	4.7	4.5	4.4	4.3	4.4	4.2	4.2	4.2	4.3
Financial and insurance activities	11.6	11.7	11.9	11.7	11.9	12.0	12.1	12.0	11.7	11.8
Real estate activities	6.4	6.2	6.1	6.2	6.1	6.0	5.9	5.9	5.9	5.9
Education	4.4	4.4	4.5	4.8	4.8	4.9	4.9	4.9	4.9	4.7
Export oriented enterprises	6.3	6.2	6.2	6.2	5.9	5.8	5.2	4.9	4.6	4.3
GDP Growth (%)	4.4	4.1	3.5	3.4	3.7	3.6	3.8	3.8	3.8	3.0

Source: Statistics Mauritius

The five-year GVA trend for the Mauritian manufacturing sector is unpacked by sub-sector in Table 6. As is clearly demonstrated, most sub-sectors have experienced declining production output since 2013, when measured in United States dollars (US$). Decline is moreover evident for the three largest manufacturing sub-sectors, with clothing experiencing a negative CAGR of 3.9% for the period, food products a negative CAGR of 3.1%, and beverages negative 2.4%.

These negative trends are repeated in several other sub-sectors, although there are a few sectors that have experienced positive growth, including textiles (five-year CAGR of 2.2%), rubber and plastic products (5.7%), and computer, electronic and optical products (1.6%). It is also positive to note that small manufacturers (not categorised by sub-sector) have maintained their GVA output in US$ terms.

CHAPTER 2

These manufacturers are primarily domestic market-focused, suggesting that small, locally-focused manufacturers who are in aggregate roughly the size of the dominant clothing sub-sector have performed reasonably over the five-year period to 2018.

Table 6: Gross Value Added by manufacturing sub-sector (large enterprises only), 2014-2018 (US$)

NSIC	Industry group	GVA at basic prices in (US$)						5-year CAGR
		2013	2014	2015	2016	2017	2018	
10-33	Manufacturing	1 746 860 636	1 803 825 889	1 573 432 689	1 572 764 078	1 622 876 234	1 616 029 752	-2,7%
	(a) Large establishments	1 433 086 640	1 465 909 671	1 266 317 728	1 250 213 869	1 281 681 686	1 276 274 612	-3,4%
10	Food products, incl. sugar	323 179 530	319 307 124	278 075 961	283 251 413	282 456 373	281 264 764	-3,1%
11	Beverages	250 598 207	253 213 692	212 568 899	219 695 042	231 074 876	230 100 033	-2,4%
13	Textiles	86 751 675	87 695 692	77 723 936	92 861 587	96 183 220	95 777 448	2,2%
14	Clothing	401 002 070	392 453 457	378 328 531	334 308 889	336 166 475	334 748 278	-3,9%
15	Leather & related products	8 831 721	41 911 092	7 446 728	7 000 565	7 145 141	7 114 998	-35,8%
152	Of which: Footwear	1 755 023	1 283 269	1 074 755	951 867	794 483	791 131	-11,4%
16	Wood products, excl. furniture	2 595 452	3 057 498	2 853 254	3 161 975	3 012 738	3 000 029	-0,5%
17	Paper & paper products	17 248 380	18 040 257	15 123 130	14 954 385	14 513 464	14 452 235	-5,4%
18	Printing, reproduction of recorded media	30 229 868	26 799 668	23 229 434	27 389 770	25 915 562	25 806 231	-0,9%
19-21	Coke & refined petroleum; chemicals; pharmaceuticals	82 071 791	69 797 644	61 417 103	61 133 064	57 563 993	57 321 146	-4,8%
22	Rubber & plastic products	32 844 233	34 323 213	28 079 082	32 553 290	42 979 909	42 798 588	5,7%
23	Other non-metallic mineral products	40 871 355	43 306 096	34 615 949	31 202 958	39 594 721	39 427 681	-2,3%
24	Basic metals	11 219 154	11 769 507	9 443 123	6 181 324	6 466 892	6 439 610	-14,0%
25	Fabricated metal products, excl. machinery, equipment	34 196 389	40 864 838	32 487 051	32 512 830	34 122 124	33 978 172	-4,5%
26	Computer, electronic & optical products	16 229 232	13 608 069	10 888 889	14 407 336	14 540 218	14 478 877	1,6%
27	Electrical equipment	5 610 819	6 358 784	5 800 733	5 694 229	6 003 537	5 978 210	-1,5%
28	Machinery & equipment n.e.c.	13 809 880	16 594 463	18 114 777	11 306 045	3 942 578	3 925 946	-30,3%
29-30	Motor vehicles, trailers, other transport equipment	28 789 394	32 444 020	25 643 952	30 359 467	32 369 678	32 233 119	-0,2%
31	Furniture	11 007 276	13 499 719	10 520 822	12 598 055	11 825 221	11 775 333	-3,4%
32	Other	33 907 930	38 572 561	32 018 870	27 177 749	33 864 430	33 721 565	-3,3%
321	Of which: Jewellery & related articles	14 585 337	17 420 631	14 286 882	8 823 770	15 162 800	15 098 832	-3,5%
33	Repair, installation of machinery, equipment	2 092 873	2 285 505	1 937 504	2 463 897	1 940 537	1 932 350	-4,1%
(b) Other than large establishments		313 773 996	337 916 218	307 114 961	322 550 209	341 194 548	339 755 139	0,1%

Source: Statistics Mauritius

While the evidence presented above reveals the extent to which the manufacturing and broader industrial sector remain critical to the Mauritian economy, its recent performance can be summarised as non-dynamic, with this evident across the spectrum of major sub-sectors. As highlighted below, this non-dynamism is moreover evident in respect of all key indicators, and not only manufacturing value addition.

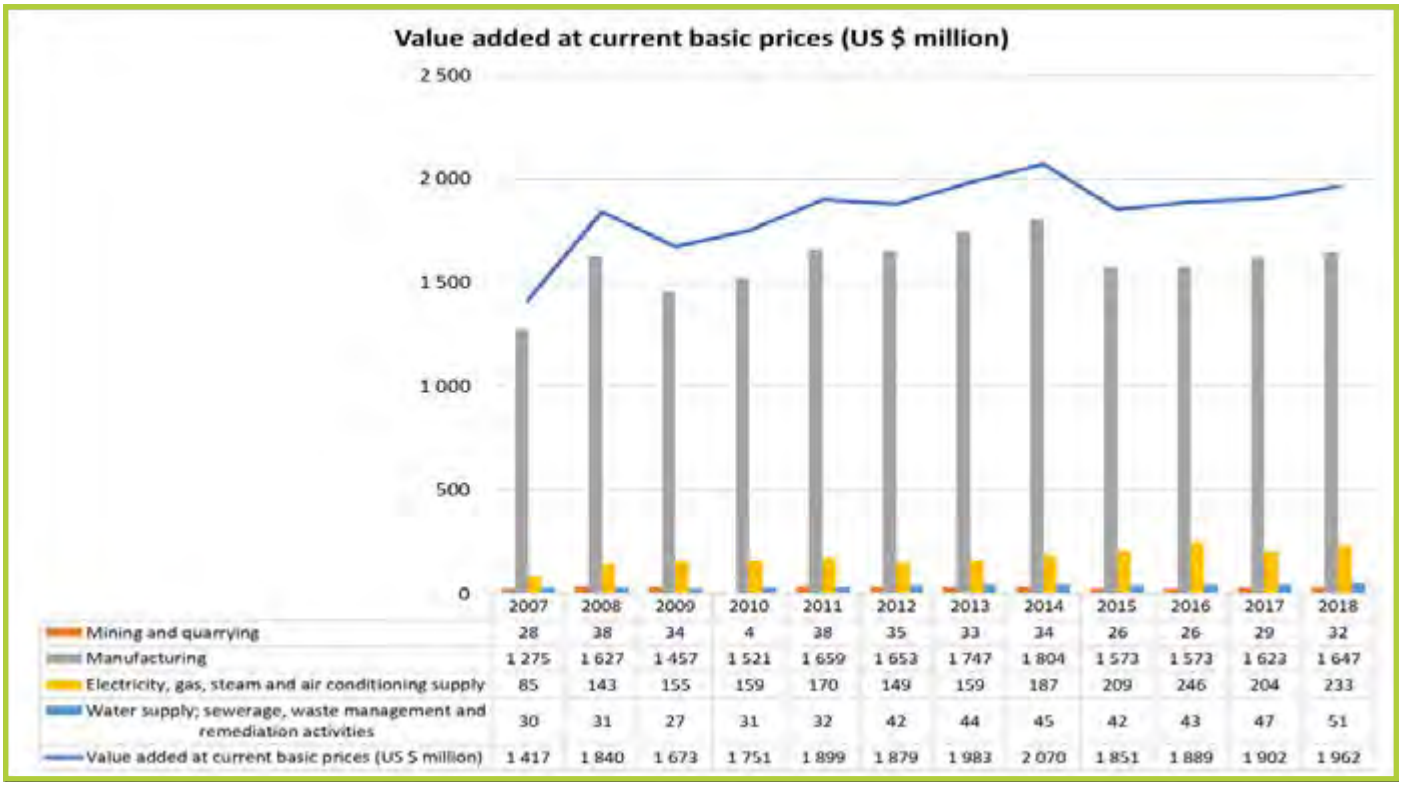
Performance trends are concerning when analysing export performance, merchandise imports, trade performance, employment, investment, and productivity shifts. Each of these critical elements is analysed in more detail hereby.

CHAPTER 2

2.2. MANUFACTURING VALUE ADDITION

Measured in US Dollars (US$), Gross Value Added (GVA) in the Mauritian manufacturing sector has remained range bound between US$ 1.5 and US$ 1.8 billion since 2008, with 2018 levels firmly within this range at US$1.65 billion. The Mauritian manufacturing sector's largely non-dynamic GVA trend is depicted in Figure 1, which also shows that manufacturing GVA peaked in 2014, slumped in 2015 and then slowly recovered through to 2018.

Figure 1: Mauritian industrial GVA, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	28	38	34	4	38	35	33	34	26	26	29	32
Manufacturing	1 275	1 627	1 457	1 521	1 659	1 653	1 747	1 804	1 573	1 573	1 623	1 647
Electricity, gas, steam and air conditioning supply	85	143	155	159	170	149	159	187	209	246	204	233
Water supply; sewerage, waste management and remediation activities	30	31	27	31	32	42	44	45	42	43	47	51
Value added at current basic prices (US $ million)	1 417	1 840	1 673	1 751	1 899	1 879	1 983	2 070	1 851	1 889	1 902	1 962

Source: Statistics Mauritius, 2019; Oanda, 2019.

The major highlight in respect of Mauritius' recent industrial performance is the growth of energy (electricity, gas, steam, and air conditioning supply) generation GVA. This has surged, increasing from US$85 million in 2007 to US$233 million in 2018, indicating major expansion of Mauritius' electricity generation capabilities. Mauritian electricity costs, while still high by African standards, are also converging with leading African economies. Mauritius now also has the most reliable electricity supply in Africa (see Appendix A). As a critical input into the manufacturing sector, the recent expansion of Mauritius' energy capacity is a source of competitive advantage.

CHAPTER 2

2.3. DOMESTIC MARKET MERCHANDISE CONSUMPTION

Mauritius' growing economic wealth has shifted its consumption profile, with imports increasing significantly over the last few years. Strikingly, Mauritius is increasingly importing more middle-class consumption goods, resulting in high import CAGRs across a wide range of manufactured products. Only major imports (value greater than US$5 million in 2018) that have grown at a CAGR of more than 7% over the last five years are included in Table 7, and as revealed this encompasses 30 products – from toilet paper to motor vehicles. It also contains several product categories where Mauritius is a major exporter, including T-shirts and vests (HS 6109), women or girls' blouses (HS 6206), and women or girls' suits (HS 6104).

Table 7: Major Mauritian imports (2018 imports >US$5m) that grew at a CAGR of >7% over the 5 years to 2018

HS Code	Product Description	2018	CAGR (5 years)
9406	Prefabricated buildings	18 423 332	45,52%
7207	Semi-finished products of iron or non-alloy steel.	5 636 431	40,62%
8705	Special purpose motor vehicles, e.g. breakdown lorries, crane lorries, fire fighting vehicles, etc.	5 901 733	31,46%
5101	Wool, not carded or combed	13 245 421	29,00%
2915	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides, etc.	5 485 836	24,15%
5209	Woven fabrics, containing 85% or more by weight of cotton, weighing more than 200 g/m2	15 380 912	22,39%
2309	Preparations of a kind used in animal feeding.	15 852 501	20,38%
6109	T-shirts, singlets and other vests, knitted or crocheted	6 476 605	18,66%
7308	Structures (excl. prefabricated buildings of HS94.06) &parts of structures… of iron or steel, etc.	17 087 426	16,29%
6206	Women's or girls' blouses, shirts and shirt-blouses	7 403 981	16,03%
7612	Aluminium casks, drums, cans, boxes, similar, for any material, of capacity not exceeding 300l...	6 768 616	14,59%
8701	Tractors (other than tractors of HS87.09)	9 321 356	13,27%
4412	Plywood, veneered panels and similar laminated wood	16 755 683	13,22%
7306	Other tubes, pipes and hollow profiles of iron or steel	17 623 790	12,14%
3214	Glaziers' putty, grafting putty, resin cements, etc.	5 393 826	11,94%
6405	Other footwear	8 533 527	11,78%
6104	Women's or girls' suits, jackets, dresses, skirts, etc., knitted or crocheted	5 060 003	11,09%
2208	Undenatured ethyl alcohol less than 80%vol.; spirits, liqueurs, other spirit beverages	13 645 098	10,76%
2008	Fruit, nuts and other edible parts of plants, otherwise prepared or preserved, etc.	6 349 046	9,91%
8803	Parts of goods of HS88.01 or 88.02	12 074 387	9,71%
7318	Screws, bolts, nuts, coach screws, screw hooks, rivets, etc., of iron or steel	7 129 954	9,31%
7213	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	22 540 446	9,17%
3208	Paints, varnishes based on synthetic polymers/chemically modified natural polymers, etc.	5 196 589	8,83%
3303	Perfumes and toilet waters	18 089 842	8,51%
8703	Motor cars and other motor vehicles for the transport of persons (excl. HS87.02)	250 017 072	8,17%
6404	Footwear with outer soles of rubber, plastics, leather… and uppers of textile materials	10 850 625	8,00%
3306	Preparations for oral or dental hygiene, including denture fixative pastes/powders; floss, etc.	6 747 032	7,95%
8704	Motor vehicles for the transport of goods	60 979 152	7,85%
4818	Toilet paper and similar paper, cellulose wadding… for household or sanitary purposes, etc.	14 039 247	7,82%
3402	Organic surface-active agents (except soap); surface-active, washing, cleaning preparations	18 065 870	7,39%

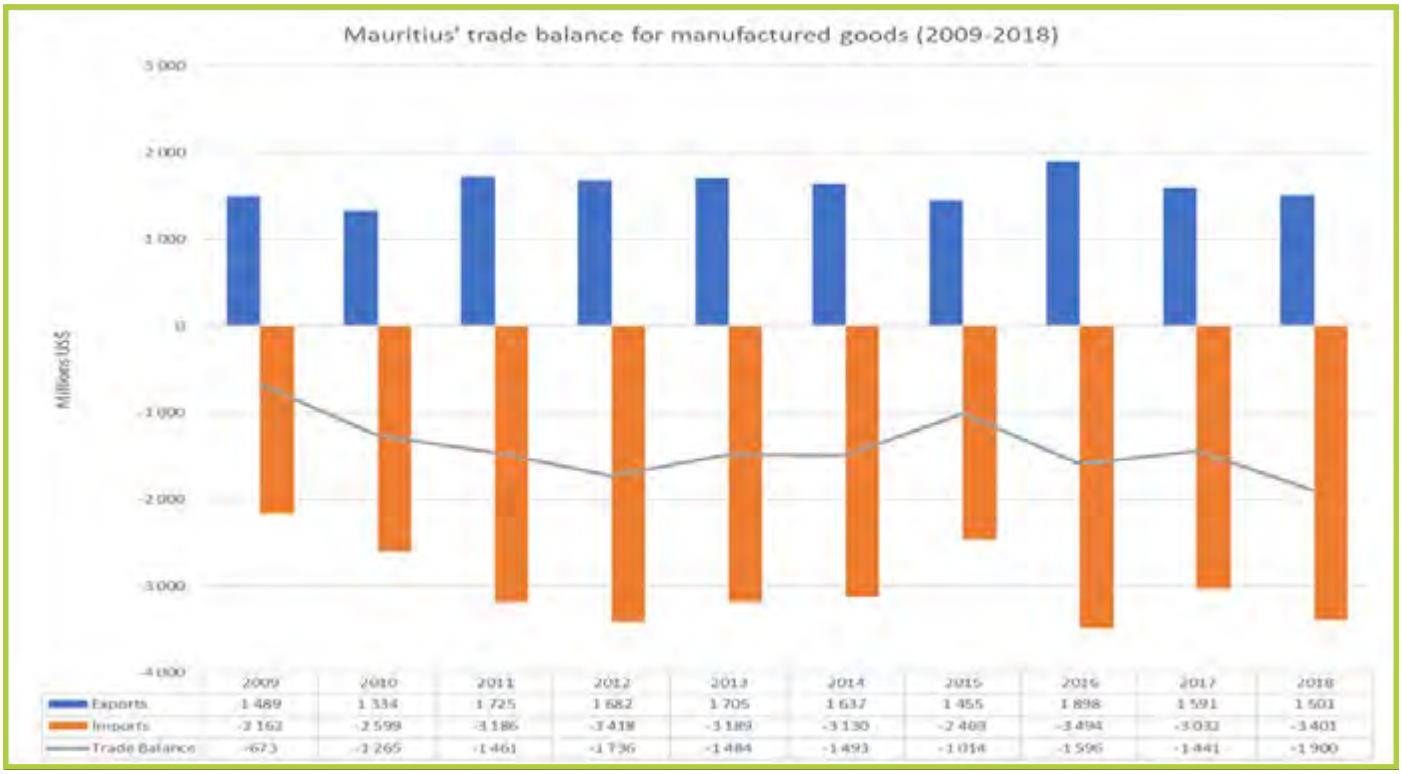
Source: UN Comtrade, 2019.

CHAPTER 2

2.4. MERCHANDISE TRADE BALANCE

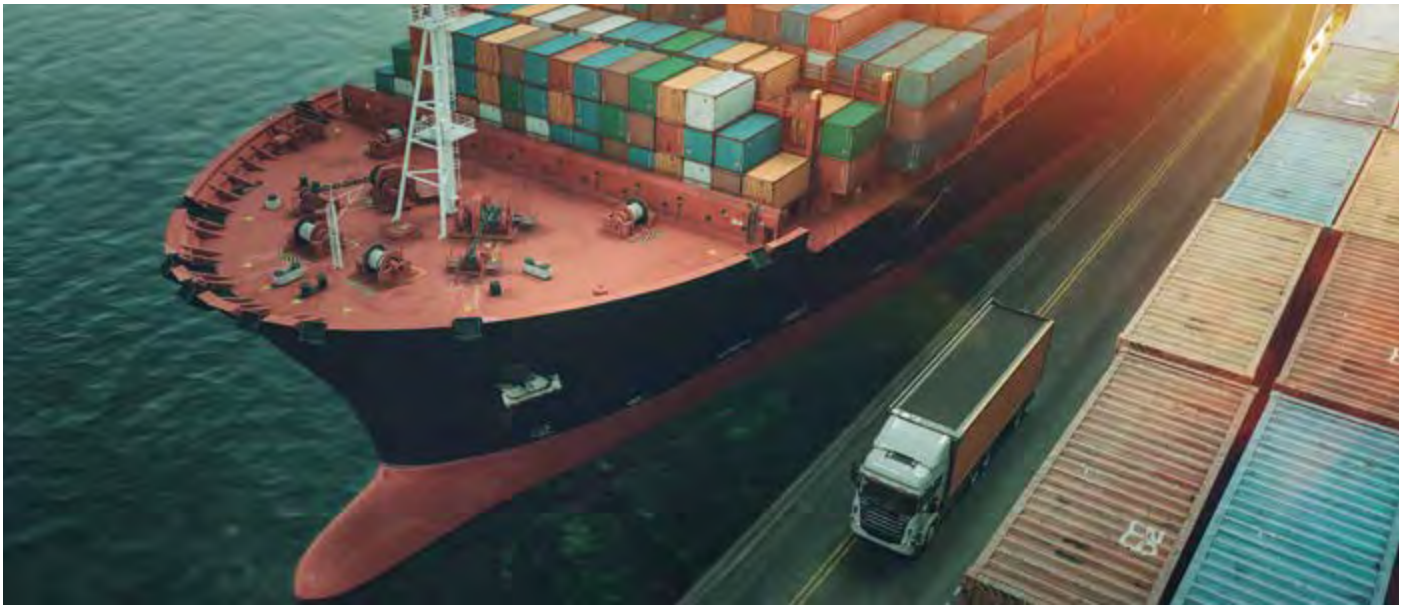
The consequence of these shifts is a major change in Mauritius' merchandise trade performance over the last decade. This is summarised in Figure 2, which shows that the importation of manufactured goods has increased significantly since 2009, resulting in a widening trade deficit (fromUS$673 million in 2009 to US$1.5 billion in 2014 and US$1.9 billion in 2018). As further revealed in Figure 2, manufacturing exports have largely followed the same non-dynamic GVA trajectory evident for the overall manufacturing sector. Consequently, manufactured products are becoming an increasing burden on the country's already large and growing trade deficit.

Figure 2: Mauritius' manufactured goods trade balance



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Exports	1 489	1 334	1 725	1 682	1 705	1 637	1 455	1 898	1 591	1 501
Imports	-2 162	-2 599	-3 186	-3 418	-3 189	-3 130	-2 469	-3 494	-3 032	-3 401
Trade Balance	-673	-1 265	-1 461	-1 736	-1 484	-1 493	-1 014	-1 596	-1 441	-1 900

Source: UN Comtrade, 2019.



CHAPTER 2

2.5. MANUFACTURING EXPORT PERFORMANCE

The aggregate export picture is severely skewed by the recent poor performance of certain dominant clothing and textiles sub-sectors. Several smaller manufacturing sub-sectors, like articles for the conveyancing or packing of goods, of plastic (HS 3923), medical instruments (HS 9018), medicaments (HS 3004), and pasta (HS 1902) have experienced significant export growth. This is clearly revealed in Table 8, which highlights Mauritius 20 most important merchandise exports in 2018, as well as their recent trends.

Table 8: Mauritius' 20 most important merchandise exports, 2004, 2014, 2018 (US$)

Rank	HS code	Product Description	2004	2014	2018	CAGR (15 years)
1	1604	Prepared/preserved fish; caviar/fish egg substitutes	81 438 280	310 097 408	287 539 264	9,43%
2	6109	T-shirts, singlets, other vests, knitted or crocheted	437 670 624	230 653 520	146 930 320	-7,50%
3	1701	Cane/beet sugar and… pure sucrose, in solid form	354 761 216	253 969 232	145 735 120	-6,16%
4	6205	Men's or boys' shirts	132 602 168	166 821 344	138 139 968	0,29%
5	6203	Men's or boys' suits, jackets, trousers, etc..	71 532 896	115 836 904	115 630 440	3,49%
6	6204	Women's or girls' suits, jackets, skirts, etc.	68 137 696	47 656 464	55 003 796	-1,52%
7	6110	Jerseys, pullovers, etc., knitted or crocheted.	106 253 312	61 392 460	45 245 704	-5,92%
8	3923	Articles for conveyance/packing of goods, of plastics, etc.	3 587 985	1 338 594	37 881 660	18,33%
9	6104	Women's or girls' suits, jackets,etc., knitted or crocheted	16 632 101	58 976 620	32 980 680	5,01%
10	6105	Men's or boys' shirts, knitted or crocheted	32 535 760	30 577 888	32 928 108	0,09%
11	9018	Instruments used in medical, surgical, dental… sciences	3 880 916	17 127 128	30 085 624	15,75%
12	3004	Medicaments (excl. HS 30.02/.05/.06) of mixed/ unmixed products for therapeutic/prophylactic use…	4 270 503	1 143 847	28 372 024	14,48%
13	5205	Cotton yarn (except sewing thread), containing 85% or more by weight of cotton, not for retail sale	5 022 762	15 382 302	22 918 568	11,45%
14	2711	Petroleum gases and other gas hydrocarbons	1 454 356	0	21 187 398	21,09%
15	2207	Undenatured ethyl alcohol of 80% vol. or higher; ethyl alcohol/other spirits, denatured, any strength	1 940 334	4 573 372	18 207 084	17,34%
16	1902	Pasta, whether or not cooked or stuffed (with meat or other substances) or otherwise prepared	2 181 015	7 096 474	17 639 870	16,10%
17	6006	Other knitted or crocheted fabrics	769 393	10 814 955	17 263 516	24,88%
18	6001	Pile fabrics, incl. terry fabrics, knitted or crocheted	8 332 389	20 981 388	16 796 642	5,13%
19	5106	Yarn of carded wool, not for retail sale	6 886 643	16 582 354	16 470 761	6,43%
20	5208	Woven fabrics, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	8 039 205	5 113 514	14 712 911	4,41%

Source: UN Comtrade, 2019.

CHAPTER 2

Mauritius' most important merchandise export destinations are presented in Table 9. As highlighted, exports to the country's two most important destinations, France and the United Kingdom, have declined very significantly over the last few years. While the losses from 2014 to 2018 are significant in their own right, it is the comparison against 2004 levels that highlights the extent of the losses that have occurred, with exports to the UK in 2018 roughly only one-third their level in 2004. These dramatic losses have been partly compensated by the growing exports to regional markets, the most important of which are South Africa, Madagascar, and Kenya. Export growth to all three of these countries has been very significant, including most recently. This suggests a major shift in Mauritius' export orientation, and the likely importance of regional trade to the future of the country's manufacturing sector.

Table 9: Mauritius' ten most important export destinations (US$)

Rank	Country	2004	2014	2016	2018	CAGR (last 15years)	CAGR (last 5 years)
1	France	332 679 488	242 449 024	221 148 576	221 936 640	-2,85%	-2,19%
2	United Kingdom	627 539 328	350 142 592	348 156 288	211 943 392	-7,46%	-11,79%
3	South Africa	17 103 692	164 886 080	146 294 400	204 144 560	19,38%	5,48%
4	United States	259 742 784	211 397 344	196 358 304	163 265 696	-3,26%	-6,25%
5	Madagascar	72 662 336	71 528 144	81 447 080	102 633 672	2,50%	9,45%
6	Spain	19 565 576	104 212 880	140 388 096	88 879 664	11,42%	-3,90%
7	Italy	62 248 672	161 701 696	277 055 744	86 272 312	2,36%	-14,53%
8	Netherlands	32 652 708	64 007 516	101 747 224	77 765 472	6,39%	4,99%
9	Kenya	2 516 690	2 757 379	45 616 208	47 358 452	23,32%	103,58%
10	Germany	39 080 888	16 110 270	31 093 812	36 590 632	-0,47%	22,76%

Source: UN Comtrade, 2019.

CHAPTER 2

2.6. EMPLOYMENT

Perhaps unsurprisingly, given GVA trends, Mauritius' manufacturing sector has failed to grow its employment base over the last five years. This is depicted in Figure 3, which reveals that employment has essentially been stable since 2014, with this evident for both large (primarily export-focused) and small and medium enterprises (SMEs). If a longer time frame is considered then the trend is even more concerning, with large manufacturing enterprise employment declining by over 20,000 from 2007 to 2018.

Figure 3: Mauritian SME and large establishment manufacturing employment, 2014 to 2018

Source: Statistics Mauritius (2020)

Based on Statistics Mauritius (2020) employment data[3] for large manufacturing enterprises, which was then adjusted to accommodate an identical breakdown for SMEs (for which there is no sub-sector data), we are able to estimate total employment numbers for Mauritius' manufacturing sub-sectors. Based on this estimation methodology, total clothing employment in 2018 was 49,316, followed by food processing (17,316), textiles (8,039), beverages (3,566), chemicals and pharmaceutical products (3,472), and fabricated metals (3,258). Together these six sectors contributewell over 80% of total manufacturing employment, with clothing and textiles alone contributing more than 50% of all manufacturing jobs in Mauritius.

It is therefore the most important manufacturing sub-sector in Mauritius by some distance, although its employment trajectory has come under sustained pressure over the last decade, with the large clothing manufacturers decreasing their employment levels from 51,149 in 2007 to 33,635 in 2018. Positively, some pockets of manufacturing employment growth have been evident for the same period, including for food products, chemicals and pharmaceutical products, and paper and paper products. A breakdown of estimated employment levels in the manufacturing sector for 2018 is presented in Table 10.

3 Accessed from http://statsmauritius.govmu.org/English/StatsbySubj/Pages/Manufacturing.aspx (2020, 22 May).

Table 10: Estimated breakdown of employment in the Mauritian manufacturing sector, 2018

NSIC	Industry group	Employment
10-33	Manufacturing total	103 411
10	Food products	17 316
11	Beverages	3 566
13	Textiles	8 039
14	Wearing apparel (clothing)	49 316
15	Leather and related products	1 207
16	Wood and products of wood/cork, except furniture; articles of straw, plaiting materials	625
17	Paper and paper products	918
18	Printing and reproduction of recorded media	2 394
19-21	Coke and refined petroleum products/chemicals and chemical products/basic pharmaceutical products and pharmaceutical preparations	3 472
22	Rubber and plastic products	2 039
23	Other non-metallic mineral products	1 214
24	Basic metals	641
25	Fabricated metal products, except machinery and equipment	3 258
26	Computer, electronic and optical products	1 666
27	Electrical equipment	503
28	Machinery and equipment n.e.c.	236
29-30	Motor vehicles, trailers and semi-trailers / Other transport equipment	339
31	Furniture	1 201
32	Other	2 282
321	Of which Jewellery, bijouterie and related articles	2 054
33	Repair and installation of machinery and equipment	1 125

Source: Adapted from Statistics Mauritius.

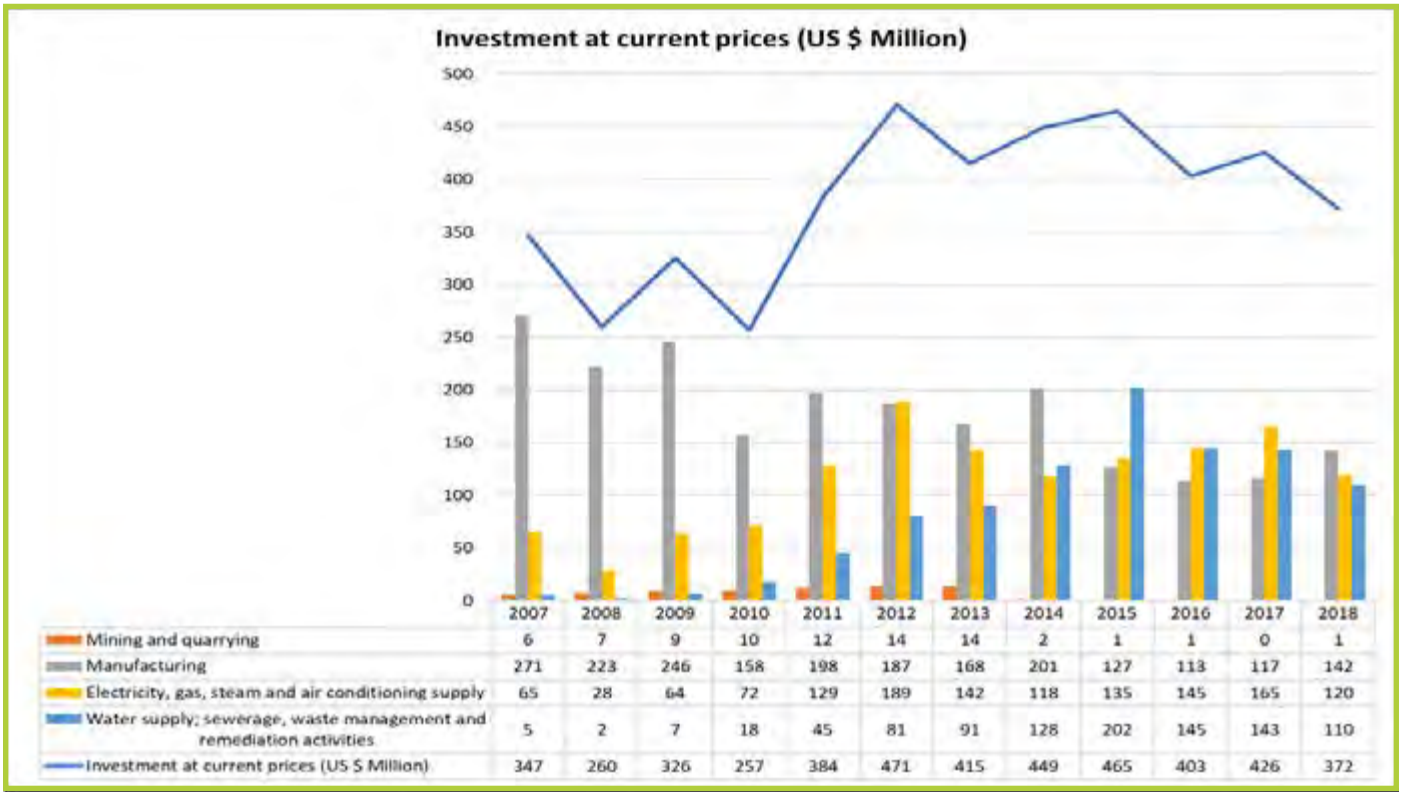
Courtesy: Eurolux

CHAPTER 2

2.7. INVESTMENT

Mauritian industrial investment for the period 2007 to 2018 is presented in Figure 4, and as revealed manufacturing investment has atrophied over the last 12 years, with 2018 investment levels of US$ 142 million almost half 2007 levels of US$271 million. Substantial investment in electricity and other forms of energy, as well as water supply, has bolstered the industrial sector's overall investment performance, but the weakness in manufacturing has ensured frail performance for the period.

Figure 4: Mauritian industrial investment, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	6	7	9	10	12	14	14	2	1	1	0	1
Manufacturing	271	223	246	158	198	187	168	201	127	113	117	142
Electricity, gas, steam and air conditioning supply	65	28	64	72	129	189	142	118	135	145	165	120
Water supply; sewerage, waste management and remediation activities	5	2	7	18	45	81	91	128	202	145	143	110
Investment at current prices (US $ Million)	347	260	326	257	384	471	415	449	465	403	426	372

Source: Statistics Mauritius, 2019; Oanda, 2019.

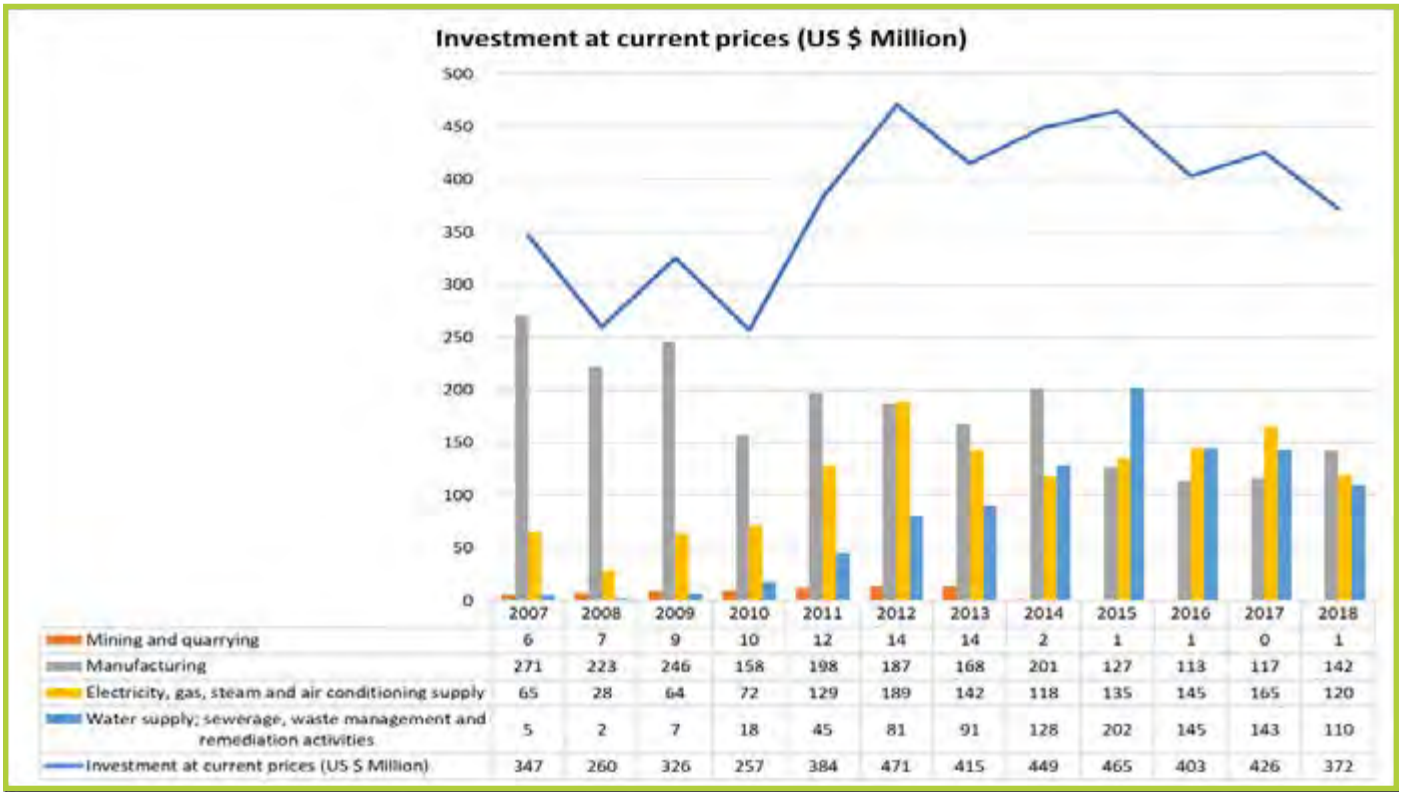
Courtesy: Plastinax

CHAPTER 2

2.8. MANUFACTURING PRODUCTIVITY

Limited investment, combined with atrophying GVA and a slow reduction in employment, point to a Mauritian manufacturing sector struggling to increase its productivity levels. This is revealed in Figure 5, which shows that Mauritian manufacturing productivity has essentially remained unchanged since 2011, shifting fromUS$22,590 per employee, to US23,346 per employee in 2018 – an increase of 3.5% over the entire seven year period.

Figure 5: Mauritian industrial GVA per employee, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	6	7	9	10	12	14	14	2	1	1	0	1
Manufacturing	271	223	246	158	198	187	168	201	127	113	117	142
Electricity, gas, steam and air conditioning supply	65	28	64	72	129	189	142	118	135	145	165	120
Water supply; sewerage, waste management and remediation activities	5	2	7	18	45	81	91	128	202	145	143	110
Investment at current prices (US $ Million)	347	260	326	257	384	471	415	449	465	403	426	372

Source: Statistics Mauritius, 2019; Oanda, 2019.

2.9. KEY MANUFACTURING DYNAMICS

2.9.1. Dominance of Clothing and Textiles

The unpacking of the macro data highlights several important manufacturing sector characteristics. The most striking is that manufacturing remains overwhelmingly dominated by clothing and textiles, along with fish processing, and other food production. The clothing and textiles sectors are, for example, responsible for seven of Mauritius' top ten export categories; and provides 55.5% of all manufacturing employment in large enterprises. While total manufacturing employment in large enterprises has dropped from 92,062 in 2007 to 70,530 in 2018, the clothing sector is responsible for most of these job losses, shedding 17,514 jobs over the last 11 years.

There is major recent export growth off a low base in medical instruments, pharmaceuticals, and plastic articles for the conveyance or packing of goods. While these developments are positive, the only manufacturing sector that operates at a level of scale that permits agglomeration effects is clothing and textiles. This is evident in the trade data that shows Mauritius' Revealed Comparative Advantage (RCA) in respect of clothing and textiles.

2.9.2. Regional opportunities

As an open economy that has developed impressively over the last few decades based on preferential trade agreements (PTAs), and the ease of doing business, Mauritius has embraced participation in Global value Chains (GVCs). Until recently, this approach has served the country exceptionally well, with preferential access to the European Union market key to its exporting success. However, while France and the United Kingdom remain Mauritius' two most important export destinations, exports to these markets have declined significantly over the last few years. This has partly been compensated by growing trade with Sub-Saharan Africa markets (via SADC and COMESA), revealing a shift towards participation in regional value chains. The emergence of South Africa, Madagascar and Kenya as major export destinations is indicative of this trend, while an analysis of COMESA and SADC market opportunities as presented in Appendix B suggests substantial scope for further export growth in these more proximate markets. Stakeholder interviews were however less positive about regional opportunities, with immense frustration often exhibited by company management in respect of actual regional trade experiences.

2.9.3. Decreasing competitiveness of Mauritius

Mauritius' participation in GVCs has clearly supported the development of its manufacturing sector. PTAs have permitted access to large markets and allowed Mauritian manufacturers to scale up their activities based on their defined areas of comparative advantage. However, these advantages appear to have dissipated recently. Internationally, the mass digitalisation, greening, and servicification of manufacturing represents a major challenge to Mauritian operations that are often geographically dislocated from their major markets, and not necessarily at the leading edge of technological transformations within complex GVCs. Domestically, Mauritius' increased wealth has stimulated the non-tradable cost base of the economy, resulting in rising production (especially labour) costs. Coupled with limited domestic labour supply, Mauritius' export- and domestic-oriented manufacturers are increasingly dependent on expatriate labour that is also becoming more expensive. This was emphasised as Mauritius' major competitiveness deficiency in almost every industry stakeholder interview and site visit. It was noted that Mauritian labour skills have failed to improve relative to global competitors, forcing an unsustainable dependence on expatriate labour for low, medium, and high skilled positions, with this particularly acute in Science, Technology, Engineering and Mathematics (STEM)-related occupations.

2.9.4. The danger of being trapped in low value-added segments of GVCs

Mauritius' export-oriented manufacturers consequently face the danger of being trapped in low value-added segments of GVCs. This is supported by the evidence that manufacturing investment levels have stalled over the last decade, while GVA per employee levels have also remained largely undynamic when measured in US$ terms. While some advanced firm-level capabilities were observed during site visits, many exporters (and most domestically focused firms) are under pressure to upgrade their manufacturing processes and deepen their capabilities. At the same time, the country needs to attract new investments that support the expansion and structural transformation of its industrial assets.

2.9.5. Growing domestic market

Mauritius' growing domestic market represents a major opportunity for many manufacturers. Rising disposable income has resulted in the increased consumption of value-added products, thereby opening the opportunity for import substitution that previously did not exist. While still a very small market by global standards, Mauritian consumption has significantly increased. In conjunction with Mauritius' tourism sector, this opens a range of potential domestic supply opportunities. This is evident in respect of Mauritius' merchandise import trends that were presented in Table 7.

Domestic market frustrations were another key feature of the engagement process with industry stakeholders. It is also an opportunity that has been eloquently identified in the MCB's (2019) report, *Lokal is Beautiful*. The report identifies a range of domestic market opportunities for local manufacturing, particularly in respect of craft production, circular production, and the application of smart production technologies. Critically, many of the technology developments taking place in manufacturing are reducing the economies of scale required for new product development and production (Hagel, et al, 2015), thereby opening new opportunities for supplying a small, but increasingly wealthy domestic market.

2.9.6. General diagnosis

The two project missions to Mauritius confirmed the data and literature review: Mauritius is at a crossroads in respect of its industrial sector. The manufacturing sector is dominated by a struggling clothing and textiles sub-sector, interspersed with the "green shoots" of emerging sub-sectors, such as medical instruments and pharmaceuticals. While the clothing and textiles sub-sector is under severe pressure because of rising costs associated with the country's increasing wealth, it comprises several advanced firms that operate at, or very close to, the sector's technology frontier. It is also the only sector where there is a critical mass of activity sufficient to create external economic advantages. While the Mauritian Government's National Export Strategy (2017-2021) does not identify clothing and textiles as a priority sub-sector, this is an oversight. Clothing and textiles remain the most competitive manufacturing sub-sectors in Mauritius, and hence the most likely to successfully export – both regionally and globally.

Although there are pockets of advanced manufacturing capability evident elsewhere (for exports and/or the domestic market), there is no critical mass of sectoral and/or value chain activity evident within other manufacturing sectors. This is a clear competitive disadvantage that will need to be corrected if Mauritius is to optimise its industrial growth potential through to 2025 in alignment with the country's 2030 vision; hence the importance of targeting the development of high potential, but smaller manufacturing sub-sectors. Opportunities in this regard include food processing (especially blue ocean based), medical instruments, pharmaceuticals, jewellery, Fast Moving Consumer Goods (FMCG, including sanitising products), and bio-plastics production.

A more detailed diagnosis of the clothing and textiles, food and fish preparation, medical devices, jewellery, and the SME sub-sectors is completed in Chapter 5.

Courtesy: CNC

CHAPTER 3

STRUCTURING AN IMPACTFUL MAURITIAN INDUSTRIAL POLICY

Courtesy: Natec

CHAPTER 3

3. STRUCTURING AN IMPACTFUL MAURITIAN INDUSTRIAL POLICY

While the Mauritian industrial sector may be at a crossroads, there is clear evidence to suggest that the industrial sector more broadly, and the manufacturing sector more narrowly, have the ability to grow dynamically and support the continued development of the Mauritian economy. A new vision for the industrial sector is however required, one that embraces upgrading and technological innovation, and that focuses on realising its potential through both the domestic and international (including regional) markets.

The following working vision is therefore proposed:

A globally competitive and sustainable industrial sector that contributes to higher economic growth for Mauritius through continuous innovation, technology upgrading, productivity gains and high skilled employment.

Private-Public sector relationships

Positively, strong private-public sector relationships, a largely conducive business environment, the widespread and honest recognition of deficiencies, and the emergent potential of the domestic market and regional value chains, offer a strong counterbalance to identified competitiveness inhibitors. A feature of the two project missions is the existence of close and constructive relationships between private and public sector stakeholders[4]. There appears to be a clear commitment on the part of both sets of stakeholders to further the industrial development of Mauritius, and to cooperate with one another to give effect to a mutually beneficial outcome. This was most strikingly evident at the industry stakeholder workshop held on the 27th of February 2020, where universal support for the development of an industry policy was evident, and the government's vision of revitalising the manufacturing sector fully endorsed. The working vision proposed in this report emanates from notes taken at the stakeholder workshop and represents the common perspectives of both private and public sector participants.

Having a common perspective is critical to the future success of the manufacturing sector in Mauritius. There is a growing awareness amongst industrial policy practitioners that the critical determinant of industrial policy success is not simply copying the policies of successfully industrialising countries and then mimicking their incentive or investment decisions. As articulated by Dani Rodrik, a leading industrial policy theorist, 'the right model for industrial policy is of strategic collaboration between the private sector and the government with the aim of uncovering where the most significant obstacles to restructuring lie and what type of interventions are most likely to remove them' (Rodrik, 2004: 3).

While learning from successful case studies is always valuable, the rapidly evolving global manufacturing environment is increasingly complex, making policies that were successful in one period, less so in others. For example, while Mauritius' negotiation of a multiplicity of PTAs and market access advantages has supported the growth and development of its export-oriented manufacturers, these very agreements are now hugely constraining to the many local manufacturing opportunities that are associated with the rapid growth of Mauritius' domestic market. Each country's individual context is key to the framing of its industrial policy opportunities. Mauritius' position as a successful upper-middle/high income, but ultimately small African island-nation matters in respect of its industrial policy options, as does its comparatively weak human resource base, weak level of food security, growing trade deficit, and its dependence on a narrow set of manufacturing sub-sectors.

Courtesy: Integrity

4 Although there do appear to be a large number of representative organisations, especially given the limited size of Mauritius' industrial sector. This is one of the reasons for the proposed institutional approach. Securing institutional alignment between the various stakeholders will be critical to the success of the industrial policy.

CHAPTER 3

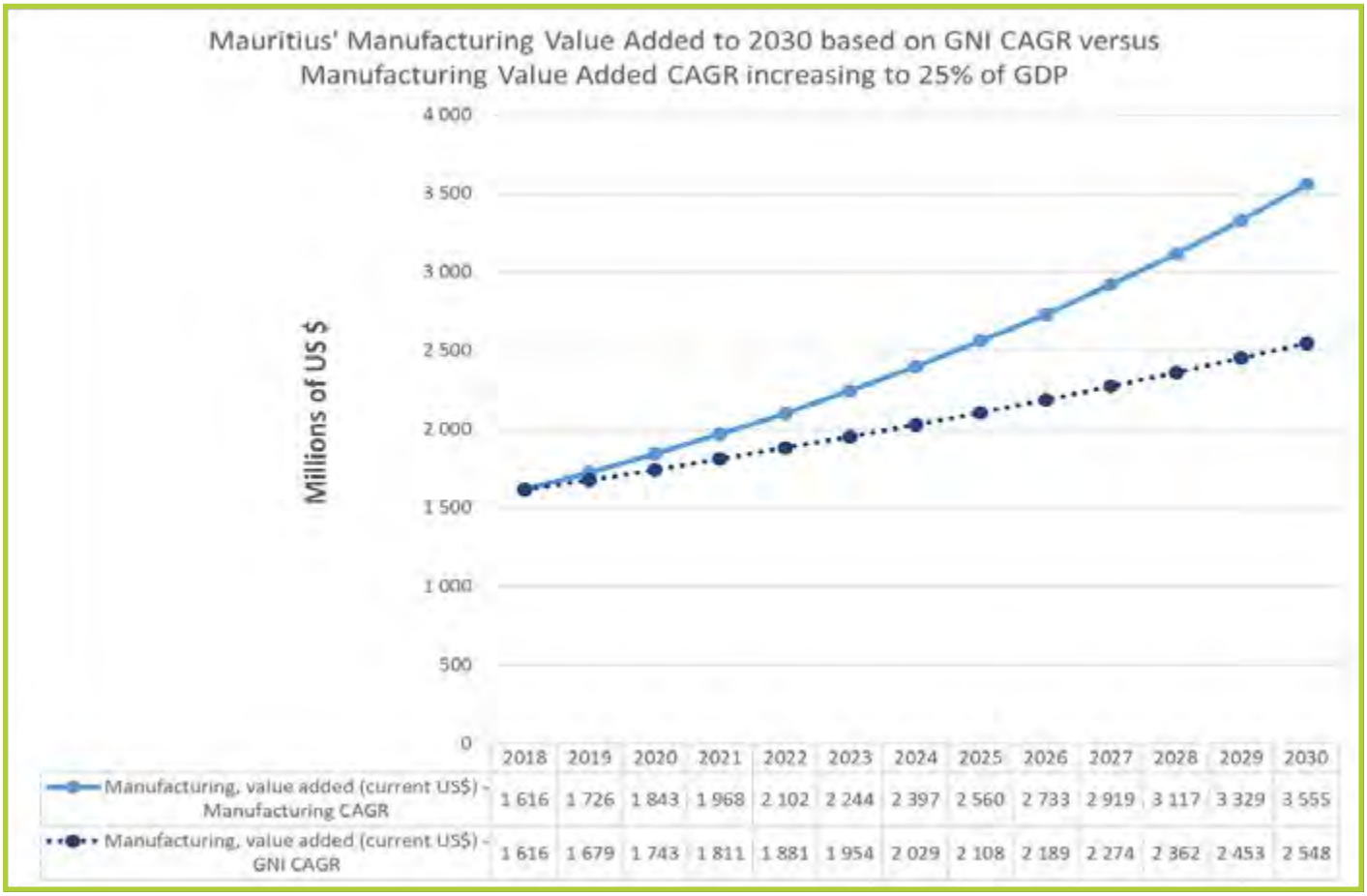
Efficient Institutional Processes

Key to successful industrial policy, is therefore, having established institutional processes capable of further enabling comparative advantages as they presently exist, while simultaneously identifying and then creating new forms of competitive advantage where potential is recognised. The institutional approach, as advocated by Rodrik, acknowledges that knowing ex-ante what needs to be done in respect of policy interventions to advance industrial capability in a particular context is inherently difficult; and that "learning by doing" represents a much more effective, and ultimately low-risk approach to industrial development, provided there is clear institutional oversight and robust monitoring and evaluation (M&E) of outcomes – in alignment with the objectives set.

It is this industrial approach that is being recommended for Mauritius. Taking advantage of the country's high trust relationship between government and industry, and the importance of optimally use the scare resources available, it is recommended that the Government of Mauritius establish an Industrial Policy Executive Oversight Committee (IP-EOC). Reporting directly to the Ministry of Industrial Development, SMEs and Cooperatives. The recommended IP-EOC should be given the mandate to oversee the implementation and potential reconfiguration of this 2025 industrial policy, thereby converting the industrial policy from a report into an institutional process capable of driving its implementation, and dealing with organisational legacies such as the categorisation of DOEs and EOEs.

How such an IP-EOC is structured should be negotiated, but it ultimately needs to be owned and resourced by the Government of Mauritius. As argued by Aggarwal (2017:11)'... *formal institutions are deeply intertwined with the informal institutions that reflect the prevailing political, social and economic interests within a society'.* Consequently, any new policy is going to be difficult to implement. Forging positive change will require strong political leadership capable of securing both stakeholder support and compromise.

Figure 6[5] : Mauritius' MVA to 2030 based on GNI CAGR v/s MVA CAGR increasing to 25% of GDP



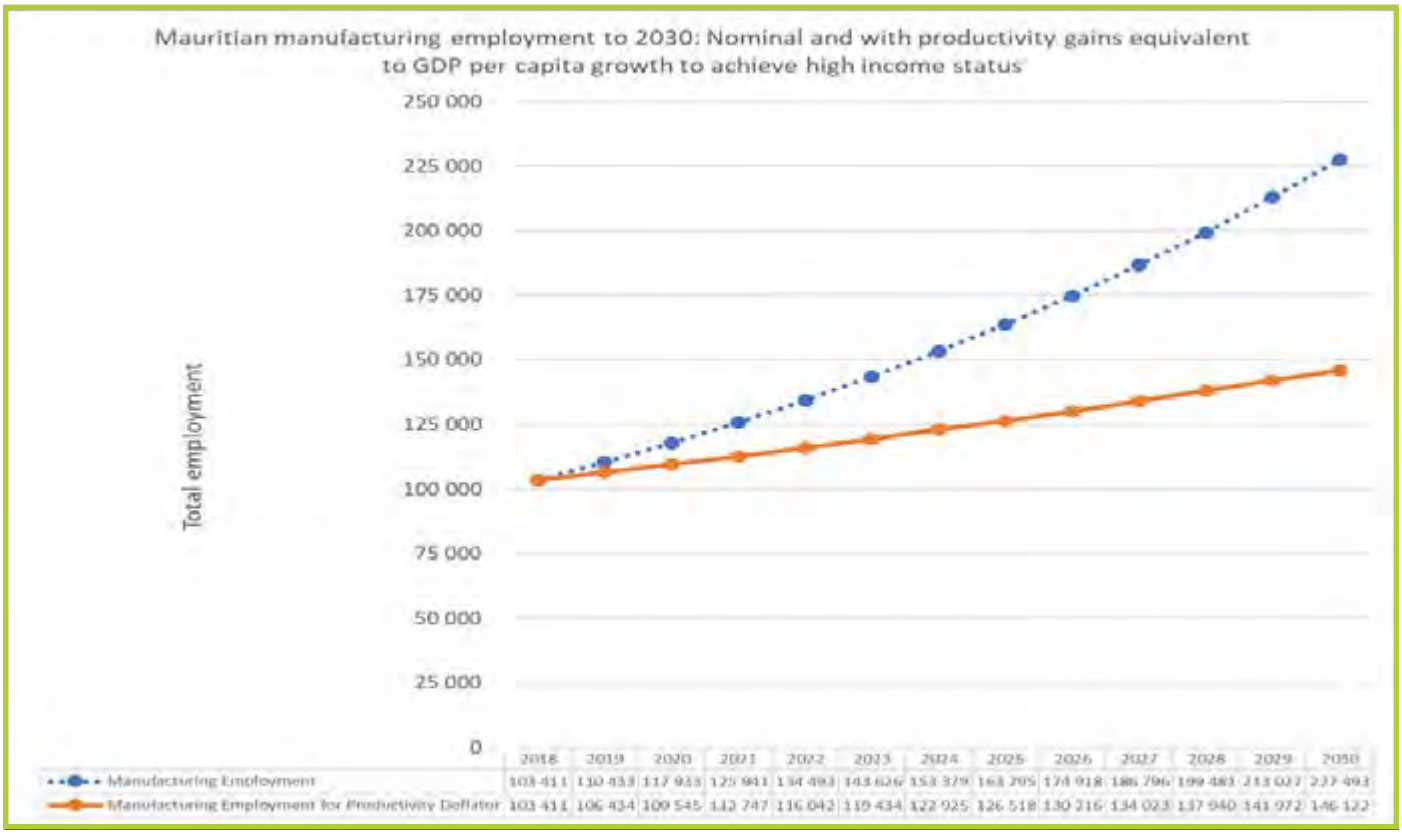
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Manufacturing, value added (current US$) - Manufacturing CAGR	1 616	1 726	1 843	1 968	2 102	2 244	2 397	2 560	2 733	2 919	3 117	3 329	3 555
Manufacturing, value added (current US$) - GNI CAGR	1 616	1 679	1 743	1 811	1 881	1 954	2 029	2 108	2 189	2 274	2 362	2 453	2 548

5 The data projections to 2030 are based on the twin objectives of Mauritius achieving a GNI per capita of US19,000 and manufacturing comprising 25% of GDP by 2030. Using actual 2018 data as the base for the calculations, the projections essentially depict the performance required of manufacturing to achieve these two objectives.

CHAPTER 3

If manufacturing sits at the heart of Mauritius' structural transformation to high income status through to 2030 productivity will need to increase in the sector by at least the average rate of per capita GNI improvement in the economy (3.87%). This represents a deflator on the employment impact of the manufacturing sector's growth through to 2030, although as highlighted in Figure 7 even with major productivity improvements, manufacturing employment will still grow significantly based on the extrapolations made. Based on the model used, the Mauritian manufacturing sector would employ 146,122 people in 2030 (an increase of 42,711 on 2018 levels), provided the country maintains its high-income status, manufacturing contributes 25% of GDP and annual productivity improvements of 3.87% are recorded.

Figure 7: Mauritian manufacturing employment to 2030: Nominal and with productivity gains equivalent to GDP per capita growth to achieve high income status



If the above aggregated employment trend is unpacked according to the 2018 breakdown of Mauritian manufacturing employment, and then held constant through to 2030, the sub-sectors most likely to contribute to major employment growth are clothing (20,369), food products (7,152), and textiles (3,320). As further presented in Table 11 there are very few other manufacturing sub-sectors with 2018 employment levels that are sufficiently substantial to compensate for these three sub-sectors not achieving their full growth potential through to 2030.

CHAPTER 3

Table 11: Projected employment growth across Mauritian manufacturing sub-sectors to 2030, based on their 2018 employment breakdown

NSIC	Industry group	2018	2022	2026	2030	Growth
10-33	**Manufacturing**	**103 411**	**116 042**	**130 216**	**146 122**	**42 711**
10	Food products	17 316	19 431	21 805	24 468	**7 152**
11	Beverages	3 566	4 002	4 490	5 039	**1 473**
13	Textiles	8 039	9 021	10 123	11 359	**3 320**
14	Wearing apparel (clothing)	49 316	55 340	62 099	69 685	**20 369**
15	Leather and related products	1 207	1 354	1 520	1 706	**499**
16	Wood products, except furniture	625	701	787	883	**258**
17	Paper and paper products	918	1 030	1 156	1 297	**379**
18	Printing & reproduction recorded media	2 394	2 686	3 015	3 383	**989**
19-21	Coke/petroleum products; chemicals; pharmaceuticals	3 472	3 896	4 372	4 906	**1 434**
22	Rubber and plastic products	2 039	2 288	2 568	2 881	**842**
23	Other non-metallic mineral products	1 214	1 362	1 529	1 715	**501**
24	Basic metals	641	719	807	906	**265**
25	Fabricated metal products, excl. machinery & equipment	3 258	3 656	4 103	4 604	**1 346**
26	Computer, electronic and optical products	1 666	1 869	2 098	2 354	**688**
27	Electrical equipment	503	564	633	711	**208**
28	Machinery and equipment nec	236	265	297	333	**97**
29-30	Motor vehicles, trailers,other transport equipment	339	380	427	479	**140**
31	Furniture	1 201	1 348	1 512	1 697	**496**
32	Other	2 282	2 561	2 874	3 225	**943**
321	Of which Jewellery, and related articles	2 054	2 305	2 586	2 902	**848**
33	Repair/installation of machinery/equipment	1 125	1 262	1 417	1 590	**465**

While the mission team is confident in its analysis of the Mauritian manufacturing sector and believes it has identified a range of policy, regulatory and programmatic interventions to support the realisation of the vision and its associated objectives, as summarised in Table 12, it is ultimately the conviction and support of industry stakeholders that will secure the success of the industrial policy, hence the proposed institutional approach.

Table 12: Summary of industrial policy vision and associated objectives to 2030

Vision	Objectives to 2030
A globally competitive and sustainable industrial sector that contributes to higher economic growth for Mauritius through continuous innovation, technology upgrading, productivity gains and high skilled employment.	Increase manufacturing GVA from $1.6 billion in 2018 to $3.6 billion
	Manufacturing to grow at a CAGR of 6.79% to ensure it contributes 25% of GDP
	Improve sector productivity by an annual 3.87% to support the economy's structural transformation to high-income status
	Increase manufacturing employment from 103,411 in 2018 to 146,122

CHAPTER 3

Industrial Policy Framework

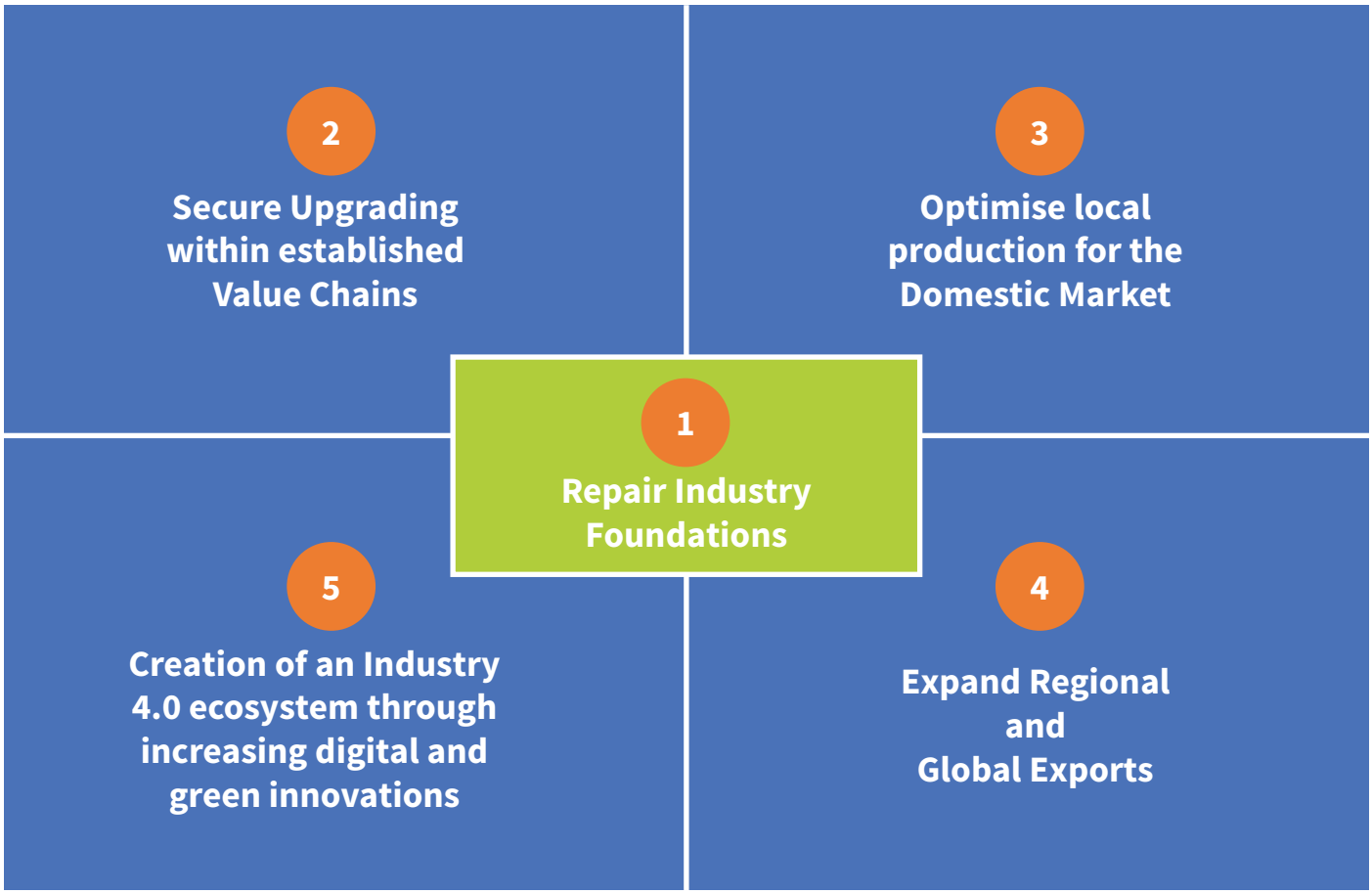
To achieve the laudable vision, and its associated four objectives, as set out in Table 12, five focus areas have been identified. The five focus areas are:

1. Repairing the industrial foundations that are presently negatively impacting the base performance of Mauritian manufacturing.
2. Supporting the upgrading of existing manufacturing capabilities – essentially enabling existing comparative and competitive advantages, which remain key to the future success of manufacturing in Mauritius.
3. Advancing production for the domestic market, in respect of both public and private sector consumption.
4. Leveraging and expanding exports within Global Value Chains and rapidly emerging Regional Value Chains (RVCs).
5. Creation of an Industry 4.0 ecosystem through increasing digital and green innovations

This is key to driving the progression of new business models,such as the servicification of manufacturing, that is likely to enable the realisation of future international, regional, and domestic market opportunities.

The five focus areas are not equally important, with the first having primacy over the others. This primacy is depicted in Figure 8. As revealed, repairing the foundations on which Mauritius' existing manufacturing value chains are built sits at the heart of realising the many further opportunities encapsulated within the other four focus areas.

Figure 8: Mauritian Industrial Policy Framework



CHAPTER 4

POLICY, REGULATORY AND PROGRAMMATIC RECOMMENDATIONS

CHAPTER 4

4. POLICY, REGULATORY AND PROGRAMMATIC RECOMMENDATIONS

4.1. REPAIRING MAURITIUS' INDUSTRIAL FOUNDATIONS

4.1.1. Foundation challenges

Repairing the foundations upon which the Mauritian manufacturing sector is built is central to advancing the scale and capabilities of the sector. Many of the essential ingredients required to build a strong and dynamic manufacturing sector in Mauritius appear to be lacking, with five major areas of deficiency noted.

Each of these areas of deficiency is unpacked below.

- **Skills development:** Mauritius' existing skills development system appears unable to meet the range and depth of industry requirements. There is a clear need to focus on basic and intermediate technical education and to raise high-level STEM capabilities. While there are several institutions working to improve this already identified deficiency, the firm-level evidence is that the skills development environment is deteriorating rather than improving. Most notably, there are no post graduate technical institutions in Mauritius providing the industry with a pipeline of advanced skills. This is stunting the availability of advanced technical skills, which is central to the development of high-value activities within most manufacturing value chains based in upper middle income and high-income economies.

- **Skills attraction:** Manufacturing careers need to be made more attractive to Mauritian secondary and tertiary education graduates. A wide range of technically oriented career opportunities was noted during firm visits and yet positions are either not being filled or are only being filled after major concessions are made in respect of the education and/or experience level of applicants. This clearly places Mauritian manufacturers at a disadvantage relative to international competitors who can readily access these skills. Firm visits suggest that the problem is manifesting even more severely in small to medium-sized manufacturers, who are either unable to afford increasing wages for scarce skills or who cannot navigate the importation of expatriate skills when local technical skills are unavailable.

- **Labour market:** The demand for labour presently exceeds domestic supply both in aggregate number and in terms of job specifications, resulting in an unsustainable and increasing dependence on expatriates. This is evident from highly skilled to entry level operational positions. A major limitation with the expatriate model is that when foreign workers complete their employment contracts in Mauritius and are required to leave the country, they take their skills with them, leading to a continuous cycle of skills losses and the ongoing need for labour replacement. When firms in Mauritius were undertaking basic assembly activities, this was not necessarily a major issue, but as firms have started moving up the value chain, as is presently required, their dependence on skilled expatriate professionals and operators has become a major challenging.

- **Soft infrastructure:** High-value manufacturing is dependent on soft infrastructure, much of which is either lacking or under-developed in Mauritius. This encompasses the ubiquitous availability of Information Technologies, market and value chain specific certification, and the systemic enforcement of technical operating standards. For domestic (and potentially regional) market supply, this requires effective competition authority oversight, the establishment and enforcement of appropriate accreditations and rules of origin, and the associated sanctioning of transgressions. Several exporting firms exhibited major frustration with Mauritian deficiencies in these critical areas, although the most vociferous concerns emanated from smaller manufacturers supplying the domestic market. There is a clear and consistent perception that the Mauritian market is insufficiently and unevenly regulated for high-value production, and has a net import bias, effectively favouring imports over domestic production.

- **Physical infrastructure:** Finally, high-value manufacturing requires global-standard physical (or hard) infrastructure, with this relating to the standards of the factories themselves and the industrial estates within which they operate. Globally competitive firms need to operate their advanced factories in world-class industrial estates, with ready access to (preferably renewable) energy and water supply, advanced water treatment facilities, and highly efficient (merchandise and people) transport linkages. These critical physical infrastructure requirements also appear to be largely lacking in Mauritius: most firms operate in ageing industrial estates, with sub-standard logistics linkages that depend on a seaport that is deemed inefficient and expensive, and that is increasingly de-linked from critical global merchandise routes.

The challenge in dealing with the above foundational issues is that they do not fit comfortably within a narrow industrial policy space. Many are transversal in so far as they straddle the evolution of education, transportation, energy, social, and other government policies over an extended period. Unfortunately, they represent an obvious disjuncture between the Mauritian government's broader policy direction and the explicit statement of support for the manufacturing sector. While there is substantial support for the manufacturing sector in respect of a suite of tax benefits and air and sea transportation subsidies, etc. broader policy shifts appear to have deprioritised manufacturing as a key driver of the Mauritian economy. Unless these foundational issues are grappled with, and the most glaring challenges resolved, it is highly unlikely that Mauritius will advance its manufacturing capabilities in alignment with its 2030 Vision.

While the balance of this section will explore concrete policy, regulatory and programmatic recommendations to positively shift Mauritius' position in respect of the other four focus areas identified, it is critical that these foundational elements are not neglected and are placed at the centre of all deliberations on the development of the manufacturing sector. This is the reason for the recommended institutional approach. If manufacturing is so important to the future of the Mauritian economy, it needs to have its status visibly elevated. This requires structured industry engagement, clear public marketing, a focus on appropriate technical education, and the allocation of resources to develop intermediate and advanced STEM capabilities.

Per Dani Rodrik's embedded autonomy approach to industrial policy (2004), both base and advancing industry requirements need to be clearly understood and responded to if confidence in Mauritian manufacturing is to be re-established.

It is therefore recommended that the Ministry of Industrial Development, SMEs and Cooperatives, in conjunction with the IP-EOC, play a coordinating role with other Ministries and state institutions to drive required changes in the complex array of areas covered.

The foundational recommendations presented below are therefore meant to be indicative only, and not prescriptive.

4.1.2. Foundational recommendations

Building robust Industry Foundations

The vision for the Industry Foundations is to build robust foundations which would contribute in developing a strong and dynamic manufacturing sector.

This vision will be supported by the following strategies:

- **Strategy 1:** Enable existing skills development system to meet the range and depth of industry requirements
- **Strategy 2:** Address the need for skilled expatriate professionals and operators
- **Strategy 3:** Align soft infrastructure with evolving manufacturing requirements
- **Strategy 4:** Upgrade hard infrastructure to international levels

4.1.2.1. Strategy 1: Enable existing skills development system to meet range and depth of industry requirements

The first strategy to build a robust industry foundation is to enable existing skills development system to meet range and depth of industry requirements. The area of intervention here is the STEM and academic triangle supporting the manufacturing sector.

It is recommended that the Mauritian government work to extend the top of the STEM and academic triangle supporting the manufacturing sector. This is key to future global competitiveness, although it also needs to be built on the educational foundations in place. Developing and reorienting these foundations is key to manufacturing sustainability and reduced dependence on expatriates. It is therefore recommended that the Ministry establish a structured process with key educational stakeholders and industry leadership on the development of a skills development roadmap for manufacturing that aligns with the growth and productivity raising objectives framed in this policy document.

Recommendation 1
Establish a skills development roadmap for the manufacturing sector

Enable existing skills development system to meet range and depth of industry requirements

Strategy	Intervention area	Recommendation
Enable existing skills development system to meet range and depth of industry requirements	The STEM and academic triangle supporting the manufacturing sector	Establish a skills development roadmap for the manufacturing sector

In support of skills development, it is also recommended that Mauritius implement a strategy to attract highly skilled expatriates to the country. This is covered in more detail in Section 4.2.

4.1.2.2. Strategy 2: Addressing the need for skilled expatriate professionals and operators

The second strategy to achieve a robust industry foundation is to address the need for skilled expatriate professionals and operators. The area of intervention here is flexibility in the labour market. The existing distinction between domestic and export-oriented manufacturers (EOEs) creates labour market and competitiveness distortions in the domestic market and is unsustainable over the long term.

However, moving to one operating regime is likely to be extremely difficult, especially as exporters believe their competitiveness will erode if they are obligated to adhere to more onerous domestic labour market regulations. Finding a mechanism to do so is however important. As a SIDS, Mauritius should not have two parallel labour markets in operation. An additional opportunity relates to improving the flexibility of the Mauritian labour market. Firms are presently struggling to adjust to increasingly unpredictable market demand fluctuations, primarily because of lengthy processes to secure necessary expatriate permits, while many are also grappling with the complexities associated with introducing new shift configurations in alignment with variable market demands.

Recommendation 2
Develop an expatriate permit expediting process to allow firms to respond to rapid market demand shifts

Recommendation 3
Develop a labour market flexibility framework that adheres to the highest international labour standards, but that enhances the ability of the manufacturing sector to adjust their capacity in alignment with market shifts.

Address the need for skilled expatriate professionals and operators

Strategy	Intervention area	Recommendations
Address the need for skilled expatriate professionals and operators	Expatriates	Develop an expatriate permit expediting process to allow firms to respond to rapid market demand shifts
	Improve flexibility in labour market	Develop a labour market flexibility framework that adheres to the highest international labour standards, but that enhances the ability of the manufacturing sector to adjust their capacity in alignment with market shifts.

4.1.2.3. Strategy 3: Align Soft infrastructure with evolving manufacturing requirements

The third strategy to achieve a robust industry foundation is to Align the Soft infrastructure with the evolving manufacturing requirements. This relates to intervention areas such as standards, accreditations and certification and the IT infrastructure.

Mauritius needs to develop its soft infrastructure in alignment with evolving manufacturing requirements. At one level, this encompasses an overhaul of Mauritian standards, accreditations, and certification processes.

This is key to not only modernising the economy, but also to ensuring exporters can prosper in high value developed economy markets. It is also key to levelling the playing field for Mauritian manufacturers supplying the domestic market. When standards are low, or enforcement of high standards lax, the inevitable result is the inflow of sub-standard imported products that outcompete local production. It is critical that this is corrected, with many manufacturers deeming the domestic market unattractive because of these perceived practices. Also tied to this, is the need for the Mauritian competitions authority to enforce trade practices that provide a level playing field for local manufacturers in the domestic market.

CHAPTER 4

Box 1: Digital Roadmap

Mauritius should develop a digital roadmap that advances the existing level of digitisation and digitalisation within the Mauritian manufacturing sector in alignment with emerging market, value chain opportunities and requirements. Consultations should be done with each of the four to five major manufacturing value chains in Mauritius (clothing and textiles, medical instruments, food processing, jewellery and FMCG) to identify their existing level of digitisation and associated digitalisation, and then map their required position to compete more effectively globally, regionally and locally over the next five and 10 years. This will identify the digital technologies that the firms and the public sector need to invest in. For example, what are the digital requirements of a textile firm relative to a food processing enterprise? What type of digital infrastructure will Mauritius need to establish to support these firms as they embrace industry 4.0 technologies? This is the key value of the digital roadmap. It should allow for the prioritisation of key public investments, and also identify the types of firm-level investment that should be supported through the MUF, the MISF, and the TII.

In addition to the introduction of more robust standards, accreditations, and certification processes, it is also recommended that Mauritius upgrade the IT infrastructure being provided to industrial estates. This is to support the repositioning of these firms in respect of emerging digitisation, digitalisation and associated servicification trends.

Recommendation 4
Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement. More specific recommendations are made in Section 4.3 (for domestic market advancement) and Section 4.4 (for leading firms in regional and export markets).

Recommendation 5
Develop a digital roadmap for priority manufacturing sectors and ensure appropriate digital infrastructure is in place for evolving business models.

Align Soft Infrastructure with evolving manufacturing requirements

Strategy	Intervention area	Recommendations
Align Soft Infrastructure with evolving manufacturing requirements	Standards, Accreditations & Certification	Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement.
	IT infrastructure	Develop a digital roadmap for priority manufacturing sectors and ensure appropriate digital infrastructure is in place for evolving business modelsalignment with market shifts.

Courtesy: RT Knits

4.1.2.4. Strategy 4: Improve the Hard infrastructure to international standards

The fourth strategy to achieve a robust industry foundation is to upgrade the hard infrastructure to international standards which relates to intervention areas such as industrial estates and the logistics infrastructure.

There are several world-class factories in Mauritius. This is testament to Mauritius' industrial capability. However, there are several industrial estates that are not at required international standards. Leading industrial estates globally now have (at least some) renewable energy supply and water harvesting, which is key to sustainable competitiveness (especially when supplying high-value markets), and yet this is distinctly lacking in Mauritius.

Some firms view this as a major limitation to their competitiveness advancement with the public sector's "dirty" energy supply and poor wastewater treatment damaging their potential shift to supplying higher value, environmentally conscious customers.

Firm and government interviews also highlighted that Mauritius' logistics positioning within global value chains has deteriorated. It was noted that fewer container ships are operating via Port Louis and that efficiencies through the report remain low, while its handling costs remain high. While these have been compensated by sea freight subsidies to certain designated ports, they are clearly deemed "second best incentives", with firms emphasising that greater route frequencies and globally competitive port rates would represent a more sustainable competitive advantage for their Mauritian operations.

Recommendation 6
Review the standard of Mauritius' industrial estates in relation to tenant production requirements and advance standards to those of leading industrial estates globally.

Recommendation 7
Review the parameters of the port's operations and align costs and connectivity standards with leading merchandise ports internationally.

Improve the Hard Infrastructure to international standards

Strategy	Intervention area	Recommendations
Improve the Hard Infrastructure to international standards	Industrial Estates	Review the standard of Mauritius' industrial estates in relation to tenant production requirements and advance standards to those of leading industrial estates globally
	Logistics infrastructure	Review the parameters of the port's operations and align costs and connectivity standards with leading merchandise ports internationally

Courtesy: RTKnits

CHAPTER 4

4.1.3. Summary of Foundational Recommendations

The seven recommendations that are focused on repairing Mauritius' industrial foundations are summarised in Table 13. As highlighted, most of the recommendations are coordination-based, reflecting the importance of inter-ministerial and public-private sector engagement in responding to operating deficiencies that need to be urgently resolved – not only in relation to Mauritius' existing production capabilities and capacity, but in respect of building the foundations for the balance of the industrial policy focus areas that are ultimately dependent on the base foundations remaining healthy and conducive to industrial development.

Table 13: Industrial policy recommendations to repair Mauritius' industrial foundations

	Recommendation	Type	Budget impact
1.	Establish a manufacturing sector skills development roadmap	Coordination	Funding for roadmap
2.	Develop an expatriate permit expediting process allowing firms to respond to rapid market demand shifts	Coordination	Resourcing of expediting process
3.	Develop a labour market flexibility framework that enhances the ability of manufacturers to adjust their capacity to market shifts	Coordination	None. Stakeholder engagement process
4.	Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement	Coordination; infrastructure	Funding of accreditation capacity
5.	Develop a digital roadmap for priority manufacturing sectors and ensure digital infrastructure is in place for evolving business models	Coordination	Funding for roadmap; and infrastructure gaps
6.	Review the standard of industrial estates; and advance standards to those of leading industrial estates globally	Coordination; infrastructure	Resources for upgrading industrial estates
7.	Review port operations and align costs and performance standards with leading merchandise ports internationally	Coordination	None. Engagement process with port

4.2. SECURING UPGRADING WITHIN ESTABLISHED MAURITIAN VALUE CHAINS

4.2.1. The upgrading challenge facing established Mauritian value chains

It is essential that Mauritius builds off its existing manufacturing investments. Whilst they do not necessarily represent "low hanging fruit", dynamism needs to be injected into incumbent operations that appear to be in a mature or declining phase of their lifecycle. The consequence is limited investment, and ultimately atrophy, as borne out by the last decade of Mauritian manufacturing data. This inertia was evident in several of the factory and stakeholder engagements. There is considerable frustration with the existing operating environment (see 4.1.) and an associated lack of confidence in the future, resulting in a "self-fulfilling prophecy" of negative sentiment, limited investment, stagnant competitiveness, limited growth, deteriorating financial returns, and hence more negative sentiment. This negative domestic cycle sends a powerful signal to potential foreign investors, ensuring their limited investment interest in Mauritius. By implication, it also increases Mauritius' dependence on domestic investment. Breaking this cycle is deemed critical to the future success of Mauritius' industry policy.

Courtesy: RTKnits

CHAPTER 4

Box 2: Investment Promotion Strategy

Investment is vital for the country's industrial growth and its economic development. For the past 12 years investment in the manufacturing sector has withered to low levels (para 2.4). In addition, investment has been targeted mostly at low-value-added activities in the manufacturing sector.

It is, therefore, essential that investment in high-value-added activities be promoted, with a view to reverse the prevailing declining trends. More dynamism needs to be injected in manufacturing operations (para 4.2.1 to attract new investments that support the expansion and structural transformation of its industrial assets (2.6.4).Unless Mauritius becomes genuinely a competitive location for investment, no investment promotion will be of value to the country.

Restoring Investment confidence through addressing Industry foundations and Upgrading of value chains (para 4.4.5)

To address successfully the Investment confidence level, it is important to focus on issues relating to:
- Industry foundations: namely, skill development, labour market adjustments, certification for standards, and improvement of logistic infrastructure
- Upgrading of the value chain: allow upgrading in value chains namely, Product diversification, Product design, Process upgrading and Higher value-added production; and
- Incentive Structure: put up an incentive structure that helps in tackling industry foundations and support the upgrading of manufacturing capabilities through:
a) Promoting Product diversification, Process upgrading and Higher value-added production.
b) Encouraging Capital Investment
c) Promoting R&D in product and service design, product or service development, testing and prototyping.

The Global Value Chain (GVC) upgrading framework represents an invaluable guide in respect of responding to this challenge (see Box 1). Aside from the repairing of foundations (which in itself will build investment confidence), established firms operating in Mauritius need to be "nudged" or incentivised into upgrading their process, product, and functional capabilities, and potentially shifting into new, more demanding value chains. It is therefore vital that the key existing value chains within Mauritius, namely clothing and textiles, food and fish processing, medical devices and pharmaceutical products, jewellery and SMEs, are systematically upgraded to ensure continued industrial growth. Doing this effectively is difficult for most manufacturers, but it is especially difficult for smaller, less-resourced firms.

Courtesy: RTKnits

Box 3: Upgrading within GVCs

The GVC literature identifies four types of manufacturing upgrading that cut across all sub-sectors of activity:

1. Process upgrading, which focuses on improving the organisation of production, supply chains, and the provision of customer services. This includes quality, environmental, and phytosanitary management and other certification systems;the use of more advanced process technologies, including new digital technologies; the development of technical and management skills to elevate productivity; and the shortening of lead times and manufacturing throughput times to improve operational flexibility.

2. Product upgrading, which focuses on improving the quality, aesthetics, functionality, and other characteristics of products being manufactured. As such, it would include the digitisation of products manufactured.

3. Functional upgrading, which encompasses the extension of value adding functions within organisations. This could be in relation to upstream activities, such as the manufacture of components; or in relation to downstream activities, like R&D, sales and marketing, or in the case of digitised products, the associated development of digitalisation services

4. Value chain upgrading, which essentially follows the establishment of advanced process, product, or functional capabilities, and that leads to firms shifting their sales to more advanced value chain chains. A highly relevant example of this type of upgrading would be clothing manufacturers shifting from making basic commodity garments for retailers, to manufacturing high specification Personal Protective Equipment (PPE) to hospitals.

All four of the upgrading types identified in the GVC literature are considered critical to sustainable industrial development, with minor or major shifts in any one of the four areas leading to improved competitiveness. Driving upgrading within the Mauritian manufacturing sector is therefore critical to building on its foundations, and increasing capabilities (and production complexity- product/process upgrading) that will open up domestic market opportunities, as well as regional and global exports, and finally, the ability to embrace emerging green and Industry 4.0 technologies. Upgrading, along with the repairing of Mauritius' industrial foundations, is therefore central to the realisation of the balance of the industrial policy plan.

Product Diversification and Design & Fashion-led production
An important concern of this industrial policy framework is the potential to achieve product diversification including high value-added production. The various types of manufacturing upgrading listed above accelerate the process of realising product diversification and high value-added production. It covers the following:
Product improvement: Improving the quality, design and functionality of products being manufactured.

Process development: improving production processes, distribution system and marketing services.

Value Added: adoption of value-added production E.g. manufacture of components, R&D, sales and marketing and enhanced digitalisation of activities.

The success of such a course of action is related to the extent the industry foundations (skills, labour, soft and hard infrastructure) and the other pillars of the industrial policy framework (domestic production, exports and Industry 4.0) have been addressed.

CHAPTER 4

One of the industrial policy challenges facing Mauritius is that its suite of firm-level incentives is primarily tax-based[6]. While this is not necessarily negative, it is one-dimensional, and in Mauritius' case, it appears to have reached its limits. Manufacturers who export are only taxed at 3%, while those supplying the domestic market are taxed at 15%. There is a range of tax-based incentives that then potentially render these taxes to 0%. The problem with this incentive structure is that once a tax incentive has rendered a firm's tax exposure to zero there are no additional tax-based levers to encourage firm alignment with national development objectives.

4.2.2. Industrial Upgrading recommendations

If the Mauritian government is wanting manufacturers to identify product, process and functional adjacencies to their existing operations, and to respond to new value chain opportunities requiring increasing technological or organisational complexity as per the framework presented in Box 4, it is essential that manufacturing upgrading be strongly incentivised. It is therefore recommended that the Ministry establish three major non-corporate income tax-based and mutually supporting incentives to drive industrial upgrading within Mauritius:

Recommendation 8
Establish a Manufacturing Upgrading Fund (MUF)

Recommendation 9
Establish a Modernisation Investment Support Fund (MISF)

Recommendation 10
Establish a Technology Innovation Incentive (TII)

These three recommendations lie at the heart of the industrial policy incentive package being proposed. Their successful implementation will not only support the upgrading of manufacturing capabilities in Mauritius, but prepare firms for the realisation of domestic, regional and global market opportunities, as well as investment in emerging green and Industry 4.0 technologies central to future manufacturing competitiveness. The three incentives are unpacked in more detail below.

4.2.2.1. Strategy 1: Promoting product diversification, process upgrading and higher value-added production.

As indicated above one of the ways to promoting product diversification, process upgrading and higher value-added production is to set up the Manufacturing Upgrading Fund.

The Manufacturing Upgrading Fund (MUF) is targeted to support established Mauritian manufacturers.Focusing on process, product, functional, and value chain upgrading opportunities as explained in Box 3, it is recommended that the MUF be well resourced, and open to all manufacturers, irrespective of their size or market orientation. Box 4 explains the MUF in more detail.

6 See Appendix C, for an overview of Mauritius' existing suite of incentives.

Box 4: Manufacturing Upgrading Fund (MUF)

Objective: Support industrial upgrading, in alignment with Mauritius' 2030 development plans.

Modality: Open innovation model, with individual firms, or two or more firms collaborating in a partnership or cluster submitting support proposals to the MUF in defined windows.

Qualifying criteria: Applying firms to receive grant support for project activities that demonstrably increase their process, product, functional or value chain capabilities over a period of up to a maximum of five years.

Payment type: Cash grant, based on demonstrated expenditure.

Payment level: Support of up to 50% of upgrading activity project costs for large firms, and up to 75% for small and medium sized manufacturers, with balance to be paid by firms. No in-kind contribution from firms recognised, unless fully allocated to the project for the duration of the recipient period.

Payment limit: Needs to be substantial to break inertia at larger firms. Recommendation is MUF support of up to Rs40 million for large firms (50% contribution), and Rs10 million for small, medium sized and mid-market manufacturers (up to 75% contribution).

Budget: Based on 30 large firms and 70 SMEs and MMEsreceiving ceiling benefits when using the MUF, the budget will need to be a substantial Rs 1.9 billion over five years.

Economy-wide benefits: Rs 3.3 billion in industrial upgrading activities over five years.

Promoting product diversification, process upgrading and higher value-added production.

Strategy	Intervention areas	Recommendations
Promoting product diversification, process upgrading and higher value-added production.	Product diversification, Process upgrading and Higher value-added production.	Establish a Manufacturing Upgrading Fund (MUF) (Rs1.9 billion over 5 years)

4.2.2.2. Strategy 2: Supporting capital investment to facilitate product diversification, process upgrading and higher value-added production

It is important to emphasise that the MUF is intended to be used in conjunction with the two additional upgrading recommendations. The first is a Modernisation Investment Support Fund (MISF), which is intended to support the MUF by supporting capital investments associated with the MUF (as well as other investments that may not be linked to the MUF), and the second a Technology Innovation Incentive (TII) that is intended to support major potential technological advancements within the Mauritian manufacturing ecosystem. The MISF is explained in Box 5, while the TII is explained in Box 6.

Courtesy: RTKnits

Box 5: Modernisation Investment Support Fund (MISF)

Objectives: Nudge the ROCE (Return on Capital Employed) calculation in favour of Mauritian investments, thereby breaking investment inertia and augmentingthe tax-based support presently being provided; support the MUF and TII.

Modality: Cash grant based on capital investment levels, inclusive of investment commissioning and direct, associated training costs.

Qualifying criteria: Demonstrated capital investment that meets the upgrading criteria set for the MUF and/or the R&D criteria set for the TII; or that represents an entirelynew Greenfield investment.

Payment: 10% of qualifying investments, payable in two instalments of 5% each, 12 months and 24 months after the successful installation of the capital equipment.

Budget: Needs to be substantial to break inertia. Based on the required levels of capital investment to support GVA growth to 2030 (based on annual capital investment equating to 8.52% of GVA, as per Mauritian data for 2014 to 2018), the total budget for this recommendation is US$112 million (Rs.4.4 billion) for the period 2020 to 2025. If continued through to 2030 in support of the NDP and manufacturing GVA contributing 25% of GDP, the total budget would need to be US$245 million (Rs. 9.6 billion) for the period 2020 to 2030.

Economy-wide benefits: As the 10% incentive is only paid to firms making demonstrated upgrading investments, the economy wide benefits of such a support package should be very substantial. To achieve high income status and manufacturing sector growth to 25% of GDP Mauritius will need to attract US$2.45 billion in manufacturing investment over the period 2020 to 2030, and US$1.12 billion over the period 2020 to 2025. These investments would not only increase Mauritius' manufacturing capacity, but also support the transition to higher value-added activities.

The MUF and MISF are most likely to have the biggest impact on firms in established manufacturing sectors, like clothing and textiles, food processing, FMCG, jewellery, and medical instruments. However, it is recommended that an open incentive model is used, ensuring that all manufacturers benefit equally from the two incentives. Additional support can then be provided to smaller manufacturers through the MUF, in alignment with the Mauritian government's focus on developing SMEs.

Support Capital investment to enable product diversification, process upgrading and value-added production

Strategy	Intervention areas	Recommendations
Support Capital investment to enable product diversification, process upgrading and value-added production	Capital Investments	Establish a Modernisation Investment Support Fund -(MISF)- (Rs. 4.4 billion to 2025; Rs. 9.6 billion to 2030)

4.2.2.3. Strategy 3:Promoting R&D to foster product and service design, product or service development, testing and prototyping.

The final recommendation to support industry upgrading is the Technology Innovation Incentive (TII), which has a much narrower remit than the first two recommendations. It is essential that Mauritian manufacturers are incentivised to dynamically shift their capabilities and undertake high-value Research and Development (R&D) activities in Mauritius, including ideation, product and service design, and product or service development, testing and prototyping. This would represent a powerful complement to the MUF and the MISF, ensuring that firms are incentivised to move up the value chain, and explore high-value market opportunities, as well as potentially important manufacturing servicification opportunities that could transform their business models in Mauritius.

This is presently Mauritius' most striking deficiency, with R&D sitting at only 0.36% of GDP in 2017 (World Bank, 2019). This places the country behind the African average of 0.42% and some distance from its leading regional competitor, South Africa, which spent the equivalent of 0.82% of its GDP on R&D in 2017. Mauritius' 2017 R&D to GDP expenditure level is moreover unchanged from 2007 levels, indicating a largely non-dynamic local R&D environment.

As the traditional definition of R&D no longer holds in an increasingly digital space, it is critical that a broad definition of manufacturing-linked R&D is used, including the range of digital technologies that are emerging. These the technologies associated with the Internet of Things, Industrial Internet of Things, machine learning and Artificial Intelligence, digital twinning, additive manufacturing, and the development of advanced materials. The TII is explained in Box 6.

As per the MUF and the MISF, the sectors that are most likely to be supported by the TII are clothing and textiles, food processing, medical instruments, pharmaceuticals, jewellery, FMCG, (bio)plastics, and precision metal forming and machining. It is therefore important that these sectors are consulted to ensure that the R&D centre parameters framed for them are aligned with their upgrading requirements. As an example, the clothing and textiles industry is heavily design-oriented and it is important that design is included in the scope of qualifying activities.

Box 6: Technology Innovation Incentive (TII)

Objectives: Support broad range of physical and digital R&D activity in Mauritius; thereby bolstering the national system of innovation; and driving value addition across the broader manufacturing ecosystem.

Modality: Reduce income tax on professionally qualified staff to zero for a period of ten years, provided they are working in qualifying R&D centres, as approved by the TII. This would reduce their cost to employers by 15%.R&D centres would potentially also qualify for MUF and MISF support. To support knowledge transfer and in recognition of TII support, qualifying R&D centres should be obligated to provide some capacity building to public institutions, e.g. lecturing and research support at the University of Mauritius(10 days per annum for each professional paying no income tax).

Qualifying criteria: Formal physical and digital R&D activities in defined R&D spaces (centres) linked to manufacturing.

The R&D centres must have clear ideation, product and/or service design and development activities that are linked to potential future commercialisation opportunities.

Payment: No direct payment to firms. Fiscal loss associated with reduced income tax receipts, although base income erosion is likely to be very low as the incentive will relate to lost personal income tax on R&D employment presently not taking place in Mauritius.

Budget: No direct budgeted cost.

Economy wide benefits: Establishment of R&D capabilities, with associated technology and knowledge spillovers into the broader economy. Attraction to Mauritius of highly qualified STEM professionals that could contribute to the national system of innovation, and the raising of productivity.

Promoting R&D to foster product and service design, product or service development, testing and prototyping

Strategy	Intervention areas	Recommendations
Promoting R&D to foster product and service design, product or service development, testing and prototyping	R&D in product and service design, product or service development, testing and prototyping	Establish a Technology Innovation Incentive (TII) scheme

4.2.3. Summary of value chain upgrading recommendations

The three recommendations that have been identified as central to advancing the process, product, functional and broader value chain capabilities of existing Mauritian manufacturing value chains are summarised in Table 14 below. As highlighted, these recommendations sit at the heart of the suite of industrial policy recommendations made and require substantial fiscal support. Critically, the three recommendations are intentionally focused on correcting the existing major weakness in Mauritius' established support programmes for manufacturers, which is the conferring of corporate tax-benefits that ultimately have a limited impact in a low tax operating environment (as explored in Appendix C).

The sub-sector specific diagnoses and strategies articulated in Chapter 5, and the associated sub-sector action plans presented in Appendix D, necessarily draw heavily on these upgrading incentives, although it is critical to emphasise that the incentives are meant to be sub-sector agnostic, and should therefore be open to all manufacturers operating in Mauritius.

Table 14: Industrial policy recommendations to upgrade Mauritius' established manufacturing value chains

	Recommendation	Type	Estimated budget impact
1.	Establish a Manufacturing Upgrading Fund (MUF)	Incentive – funding	Rs1.9 billion over 5 years
2.	Establish a Modernisation Investment Support Fund (MISF)	Incentive – funding	Rs 4.4 billion to 2025; Rs 9.6 billion to 2030
3.	Establish a Technology Innovation Incentive (TII)	Incentive – personal income tax	Lost personal income tax

4.3. OPTIMISING LOCAL PRODUCTION FOR THE DOMESTIC MARKET

4.3.1. The challenge of producing for the domestic market

As a small island developing state (SIDS) Mauritius has historically been prudent in enacting legislation strongly incentivising merchandise exports and negotiating a set of preferential trade agreements providing access to large, developed economy markets. When Mauritius had a low level of per capita income, and a small government budget, it was essential for the economy to focus on exports, and in reciprocation for preferential market access, to allow the small, domestic economy to be open to unfettered imports.

However, the evidence no longer supports this one dimensional industrial and associated trade policy position. Mauritius' growing domestic market, which includes many tourists and a growing middle class, representsa new "frontier" opportunity that is being lost due to industrial and associated trade policy dependencies that are no longer valid.

First, Mauritius had a per capita income of US$23,709 in 2018 (World Bank, 2019) when measured on a Purchasing Power Parity (PPP) basis, resulting in a substantial shift in both the scale and profile of the country's consumption. This is borne out by the surge in imports of "middle class goods" over the last decade.

Second, manufacturing technology shifts are reducing scale economies required for production, especially when linked to new servicification models (Hagel, et al, 2016).

Third, Mauritius will only benefit from the emergence of regional value chains if local manufacturers have a strong domestic base. Firms will not export regionally to compensate for domestic market weaknesses.

And fourth, many domestic market opportunities for manufacturers relate to food processing and FMCG products that are critical to food and sanitary security, as so strikingly highlighted by the advent of the Covid-19 pandemic.

4.3.2. Local Domestic market production recommendations

Enhance production on the domestic market

The vision for this important pillar of the proposed industrial policy framework is to enhance production on the domestic market.

This vision will be supported by the following strategies associated with several major opportunities that have been identified in respect of enhancing manufacturing for domestic market supply:

Strategy 1: Establishment of new conformance certification for food processing and fast-moving consumer goods (FMCG, e.g. detergents, soaps, etc.), and the legislation of circular economy opportunities.

Strategy 2: Promote Supermarket localisation advocacy, and support for the Made in Moris label.

Strategy 3: Designation of local manufacturing for selected government procurement.

Strategy.4: Support Monitoring and evaluation of PTAs, with rapid response processes for identified aberrations.

Strategy.5: Exploration of manufacturing servicification models, especially in areas where Mauritius has extremely high balance of payments challenges, such as the automotive industry.

Each of these recommendations is unpacked in more detail below.

4.3.2.1. Strategy 1:Establishment of a Domestic market conformance certification, and legislation of circular economy opportunities

The Mauritian market for processed foods and FMCG goods has shown consistent growth over the last decade, resulting in rapidly increasing imports of these items. Partly in response to new demand, and partly as a replacement of local production, this has led to increasing Mauritian dependence on imports. Given the importance of improved food security to Mauritius, the nutrition transition[7] that is likely to continue as a result of the country's increasing wealth, and the importance of having FMCG product availability in Mauritius, it is recommended that the government introduce domestic market conformance certification for food processing and FMCG products.

This conformance certification should include green economy credentials, including full product traceability, the sustainable sourcing of ingredients, and the recycling of packaging in Mauritius. This is partly to level the playing field for local manufacturers who are presently disadvantaged by the uneven application of domestic production and import regulations (see Section 4.1.3), but most importantly, it is key to ensuring Mauritius has productive capacity and capability in products that are central to the country's food and sanitary security.

Recommendation 11
Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production.

Establishment of a Domestic market conformance certification & legislation of circular economy opportunities

Strategy	Intervention areas	Recommendations
Establishment of a Domestic market conformance certification, and legislation of circular economy opportunities	Conformity to local standards.	Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production.

7 The nutrition transition relates to the identified shift in food consumption that occurs when societies become wealthier. At a certain point in their per capita income growth cycle, less carbohydrates are consumed, to be substituted by proteins and fats. It is also at this point that processed foods increase their penetration of the market, thereby increasing the role of manufacturing in the food ecosystem.

4.3.2.2. Strategy 2: Promote Supermarket localisation advocacy, and support for the Made in Moris label

The Mauritian market for local manufacturing is becoming increasingly dominated by supermarket chains. This has the potential to transform the consumption base of Mauritian society. Positively, by using their purchasing power, and advanced logistics infrastructure, large supermarket chains can improve both product affordability and product availability for local communities. Conversely, however, large supermarket chains also have the potential to displace local production through monopsonic trade practices. Essentially, large supermarket chains can use their concentrated purchasing power in a market they dominate to import large volumes of discounted products that not only price disciplines local producers, but that essentially displaces them.

Ensuring the potentially positive impact of supermarket growth in Mauritius is critical to the sustainability of domestic food processing and FMCG production. It is therefore recommended that the Mauritian government mandate its Competition Authority to closely monitor and sanction any inappropriate supermarket purchasing practices that actively undermine local production.

Recommendation 12
Ensure the Mauritian Competition Authority maintains close vigil over the purchasing practices of Mauritius' growing supermarket chains; and can immediately respond to evidence of monopsonic trade practices.

More positively, but still part of the process, it is recommended that the Mauritian government establish a formal advocacy process with the supermarket chains to drive local purchases wherever this is feasible. A core part of this approach is the potential to amplify the visibility and use of the Made in Moris label. This private sector label has widespread support amongst Mauritian manufacturers, and it clearly has major potential as a positive identifier of Mauritian production. Tied to emerging green economy requirements, there is also potential to tier the Made in Moris label, so that consumers are made aware of the environmental impact of the products they purchase.

Recommendation 13
Mauritian government to amplify the visibility of local production by engaging with supermarket chains on supporting local production potential, and by exploring support for the Made in Moris label with the private sector.

Promote Supermarket localisation advocacy and support for the Made in Moris label

Strategy	Intervention area	Recommendations
Promote Supermarket localisation advocacy and support for the Made in Moris label	Encourage Fair purchasing practices amongst Mauritian supermarkets/hypermarkets.	Ensure the Mauritian Competition Authority maintains close vigil over the purchasing practices of Mauritius' growing supermarket chains; and can immediately respond to evidence of monopsonic trade practices.
		Mauritian government to amplify the visibility of local production by engaging with supermarket chains on supporting local production potential, and by exploring support for the Made in Moris label with the private sector.

4.3.2.3. Strategy 3: Designation of local manufacturing for selected government procurement

One of the most powerful mechanisms that could be introduced by the Mauritian government to support local production is the designation of local manufacturing for selected government procurement. At present, the Mauritian government provides an advantage to local manufacturers in public purchasing contracts, with the advantage varying by the size of the contract and the size of the bidding manufacturers. While these represent positive support elements for local manufacturers, a far more powerful inducement for local manufacturing would be secured by designating local production for selected areas of government procurement.

It is important to emphasise that this is fully permissible as Mauritius has not signed the WTO Government Procurement Agreement, and therefore has the right to designate local production for public procurement.

Several products are likely to present themselves as major opportunities in this regard, and it is important that these be explored for designation. Products identified from the fieldwork in Mauritius include processed foods (pastas, edible oil); textiles for hospitals; soaps and detergents for schools, hospitals, and government buildings; and clothing and footwear for uniforms, including Personal Protective Equipment.

Recommendation 14
Mauritian government to investigate the designationof local manufacturing for selected government procurement contracts.

Encourage designation of local manufacturing for selected government procurement

Strategy	Intervention area	Recommendation
Encourage designation of local manufacturing for selected government procurement	Preferential procurement for local production	Mauritian government to investigate the designation of local manufacturing for selected government procurement contracts

4.3.2.4. Strategy 4: Support Monitoring and evaluation of PTAs, with rapid response to identified aberrations

To ensure that the rules of origin (ROO) and the strategic trade intent of regional and bilateral preferential trade agreements (PTAs) are adhered to, it is critical that the Mauritian government bolster its Monitoring and Evaluation (M&E) of the plethora of PTAs signed. While growing imports into the domestic market hardly featured as a major opportunity cost two decades ago, they clearly represent a major opportunity cost now, with many locally-oriented manufacturers expressing huge concern at the burgeoning growth of PTA-based imports that do not appear to conform to the PTA's ROOs or Mauritian domestic market standards that are enforced on local manufacturers. Impacted Mauritian manufacturers believe that the formal government processes to confirm and then resolve such identified aberrations are wholly inappropriate, resulting in substantial material damage to local operations. It is therefore recommended that the Mauritian government bolster its M&E of PTAs and, most importantly, establish a rapid response process capable of quarantining potential trade abuses while the formal resolution of the dispute is completed.

Recommendation 15
Review Mauritius' M&E of trade abuses, especially in respect of PTAs, and establish a remediation process that protects local manufacturers during investigations.

Support monitoring and evaluation of PTAs, with rapid response to identified aberrations

Strategy	Intervention area	Recommendation
Support monitoring and evaluation of PTAs, with rapid response to identified aberrations	PTA signed with different countries	Review Mauritius' M&E of trade abuses, especially in respect of PTAs, and establish a remediation process that protects local manufacturers during investigations

4.3.2.5. Strategy 5: Exploration of manufacturing servicification models

It is critical to the future development of Mauritian manufacturing and the domestic economy that an exploration of manufacturing servicification models be initiated. This can be accommodated with the suite of upgrading support incentives detailed in Section 4.2, but it may also require major structural policy and regulation changes across various government ministries, as opposed to incentivising firm-level, supply chain, or broader cluster innovation. This represents a major institutional challenge and sits at the heart of Rodrik's (2004) notion of embedded autonomy.

An example of a major servicification opportunity that falls into this category, is the potential to develop a cyber-physical automotive value chain in Mauritius based on a model that has been introduced in Rwanda. In Rwanda's case, this encompasses the Semi Knocked Down assembly of a VW taxi fleet that is then used as part of a VW-mobility platform that provides citizens with a platform-based taxi service that is located and optimised in Rwanda, and that is supported by an advanced service workshop that ensures the VW platform-fleet is in good running condition. Such a model has enabled the introduction of limited vehicle assembly, improvements to the country's mobility services, the creation of a digital taxi-platform, and the introduction of advanced vehicle maintenance services.

Enabling a manufacturing servification model such as the Rwandan example would require potential changes to a swathe of broader legislation and narrower automotive market regulations. To incentivise the introduction of such a model, it may also be necessary to introduce a new excise tax model. For example, instead of a taxi-fleet vehicle incurring all of its excise taxes at the point of transfer from assembly to the taxi fleet, the excise tax could be payable over a three or four year period, thereby providing the service-based production model an advantage over the standard sales model.

CHAPTER 4

Recommendation 16
Explore potential domestic manufacturing servicification models and develop appropriate market regulations that provide an advantage for these models over standard production and/or consumption models.

Initiate exploration of manufacturing servicification models and diversification of the sector

Strategy	Intervention area	Recommendations
Initiate exploration of manufacturing servicification models and diversification of the sector	Diversifying into manufacturing servicification	Explore potential domestic manufacturing servicification models and develop appropriate market regulations that provide an advantage for these models over standard production and/or consumption models

4.3.3. Summary of Domestic Market production recommendations

The six recommendations that have been put forward as major opportunities for the scaling up of production for the growing, and increasingly wealthy domestic market, are presentedin Table 15. As indicated, these recommendations are closely aligned with the foundational recommendations presented in 4.1. They do not necessarily require significant funding (at least not in the short term), but they do require careful and deliberate coordination.

The Government of Mauritius needs to strike a delicate balance between creating both large scale and niche local production activities for consumption in the domestic market, while simultaneously ensuring that the economy remains open and competitive. It is also critical that these recommendations are linked to the fifth focus area of these recommendations, which is the development of an Industry 4.0 ecosystem that fosters the creation of digital-based manufacturing servicification models that are environmentally sustainable.

Table 15: Industrial policy recommendations to optimise production for Mauritius' growing domestic market

	Recommendation	Type	Estimated budget impact
1.	Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production	Coordination	Resourcing of certification capacity
2.	Mauritian Competition Authority to monitor supermarket chain purchases; and respond to monopsonic trade practices	Coordination	None. Stakeholder engagement process
3.	Government to engage with supermarkets on supporting local production, and supporting the private sector's Made in Moris label	Coordination	Stakeholder engagement; Made in Moris label support
4.	Government to investigate the designation of local manufacturing for selected government procurement contracts	Coordination	None. Government coordination only
5.	Review Mauritius' M&E of PTAs, and establish remediation processes that protect local manufacturers during investigations	Coordination	Resourcing of PTA M&E and remediation process
6.	Explore potential domestic manufacturing servicification models, and develop market regulations that advantage these models	Coordination	Potentially substantial – but exploration dependent

4.4. EXPANDING REGIONAL AND GLOBAL EXPORTS

4.4.1. Mauritius' Export Potential

Mauritius' immediate export potential is distinctive. On the one hand the country has established export linkages for specific products in several major developed economies and South Africa (most notably clothing and textiles, but also food processing, medical instruments, plastics for the conveyancing of goods and packaging, and pharmaceuticals). On the other hand, there is recognition of the future importance of regional trade, encompassing the Indian Ocean islands and the continued growth and development of Africa.

The challenge is that the profile of regional exports is quite distinct from established global exports, requiring a two-pronged set of recommendations, encompassing two strategies as outlined below:

- **Strategy 1:** Exploration of regional opportunities to boost regional exports
- **Strategy 2:** Leveraging on global exports opportunities

4.4.2. Regional Export Opportunities

It is essential that Mauritius target specific regional market (and associated value chain development) opportunities, as not all regional markets or value chains represent major opportunities. In respect of regional trade, the biggest opportunities, as highlighted in Appendix B, are the islands of the Indian Ocean Commission (IOC), South Africa and its immediate neighbours, and the East African Community, centred around Kenya and Tanzania. These regional nodes represent areas of established or potential demand. Importantly, many of the opportunities align with Mauritius' domestic market potential, signalling the opportunity to align domestic market and associated production requirements within a broader regional framework. This is especially important to the realisation of SME regional exports, which are stymied by regulatory differences across multiple small markets.

Specific regional opportunities identified for Mauritius include establishing warehousing, and direct sea and air freight linkages to emerging IOC, EAC and Southern African markets; the extension of risk cover to firms exploring frontier markets (in the form of discounted credit guarantees), and the coordination of large-scale regional value chain developments across Mauritius' established and emerging sectors. The realisation of these opportunities will require careful coordination between the Mauritian government and key firms (institutional approach), as well as country to country trade reciprocity.

Some of the sector-specific opportunities identified from the fieldwork in Mauritius are summarised below:

- **Food processing:** Opportunity for regional health safety standards and product conformance alignment, and the coordination of a regional food security programme.
- **Clothing and textiles:** Opportunity for the development of regional value chains that target regional trade and global exports (e.g. by collaborating with South Africa and Madagascar). Key to this type of regional opportunity is securing PTA reciprocity and adherence to regional ROO.
- **Medical instruments:** Opportunity for Mauritius to position itself as an assembly and distribution centre for medical package supply into Sub-Saharan Africa. However, this will require an institutional approach involving government and industry engagement with global medical package suppliers
- **Jewellery:** Opportunity for Mauritius to position itself as a fine jewellery manufacturer targeting emerging regional domestic and tourism markets.

4.4.2.1. Strategy 1: Exploration of Regional opportunities to boost Regional exports

The exploration of regional export opportunities gives rise to the provision of three recommendations, each of which focuses on a specific element of the opportunity within the region's emerging value chains. The first focuses on establishing warehousing and direct freight linkages to targeted markets, the most promising of which appear to be South Africa, Madagascar, Kenya, and Tanzania. The second relates the Government of Mauritius providing discounted export guarantees for local manufacturing supply into high risk markets. The third focuses on the targeted development of specific regional value chain opportunities, with these tying back to Mauritius' leading manufacturing value chains, and those that have the most potential for regional growth.

Recommendation 17
Explore the establishment of warehousing and direct freight linkages to targeted African markets, with high potential.

Recommendation 18
Government to explore the provision of discounted export credit guarantees to support potentially high-risk market search activities in Sub-Saharan African markets where Mauritian manufacturers do not have a track record of supply.

Recommendation 19
Target the development of regional value chains for selected manufacturing sub-sectors, including clothing and textiles, food processing, medical instruments, and jewellery.

Exploration of Regional opportunities to boost Regional exports

Strategy	Intervention area	Recommendations
Exploration of Regional opportunities to boost regional exports	Warehousing and direct freight linkages	Explore the establishment of warehousing and direct freight linkages to targeted African markets, with high potential
	Discounted export credit guarantees	Government to explore the provision of discounted export credit guarantees to support potentially high-risk market search activities in Sub-Saharan African markets where Mauritian manufacturers do not have a track record of supply.
	Selected subsector including clothing and textiles, food processing, medical instruments, and jewellery.	Target the development of regional value chains for selected manufacturing sub-sectors, including clothing and textiles, food processing, medical instruments, and jewellery

4.4.3. Global Export Opportunities

Regional export opportunities should not be viewed as a substitute for global exports, but as an important complement. Where Mauritian manufacturers have an established export presence in major developed economy markets it is essential that these are maintained. This is especially true for the dominant clothing and textiles industry in Mauritius[8], where there is potential for it to move up the value chain into higher value market segments. As demonstrated by countries like Turkey, it is possible to maintain large-scale clothing and textiles exports in the context of sustained economic development, provided industrial capabilities are systematically upgraded. This is a key requirement to compete in high value market segments (that, for example, require green economy credentials), and to operate with the speed and flexibility needed to support the in-season trading capabilities of brick and mortar and online apparel and home textiles retailing models.

Beyond clothing and textiles, and per identified regional market opportunities, there are a range of other global export opportunities that need to be realised to support the growth and development of Mauritian manufacturing. Opportunities include:

- Negotiating PTA benefits in areas where Mauritius has established competitiveness, e.g. the supply of rum into the EU.
- Targeted warehousing and logistics (sea and air freight) support into major existing developed economy markets (UK, EU, and the USA), and potentially Australia and New Zealand.

4.4.3.1. Strategy 2: Leveraging on Global Export Opportunities

The two opportunities articulated above give rise to two global export recommendations. The first relates to the negotiation of expanded market access to the key developed economy markets Mauritius has traditionally supplied, as well as Australasia (Australia and New Zealand). The second relates to the establishment of affordable warehousing in these economies for smaller Mauritian producers. Both recommendations are deemed critical to reducing the comparative cost of Mauritian supply into these high value market, especially for smaller producers supplying the high value domestic market space, and that have the potential to transition to high value developed economy markets over the next decade.

8 It is to be noted that clothing and textiles were not covered in the Mauritian NES.

Recommendation 20
Negotiate expanded market access to key developed economy markets, including the EU, UK, USA, and Australasia.

Recommendation 21
Explore the establishment of cost-effective, SME oriented warehousing in high value developed economy markets.

It is critical to emphasise that the clothing and textiles industry represents the major scalable global export opportunity in Mauritius. Conversely, given its scale of operation, the decline of the clothing and textiles industry would likely undermine the realisation of this industrial policy. It is therefore critical that this sector remain at the forefront of Mauritian industrial policy. Specific export issues of importance to the sector include maintaining EU and AGOA access, and the provision of support for the exploration of opportunities in emerging regional, Asian, and Australasian markets. The balance of support required by the clothing and textiles industry is per the other recommendations: skills supply, labour market adjustments, certification, movement up the value chain, and logistics optimisation.

The second major global export opportunity relates to the expansion of Mauritius' food processing exports. The blue economy represents a major opportunity in this regard, with fresh and processed fish exports a particularly significant opportunity, especially when sourced from sustainable aquaculture facilities.

The regional and global export opportunities for Mauritius' key manufacturing sub-sectors are further elaborated in Chapter 5 and Appendix D.

Leveraging on Global export opportunities

Strategy	Intervention area	Recommendation
Leveraging on Global export opportunities	Traditional and new markets	Negotiate expanded market access to key developed economy markets, including the EU, UK, USA, and Australasia
	Warehousing	Explore the establishment of cost-effective, SME oriented warehousing in high value developed economy markets

4.4.4. Summary of regional and global export recommendations

The five regional and global export recommendations are summarised in Table 16. As indicated, most of the recommendations do not necessarily require significant funding. However, they do require extensive coordination between the public and private sectors.

Table 16: Industrial policy recommendations to optimise regional and global export opportunities

	Recommendation	Type	Estimated budget impact
1.	Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets	Coordination, infrastructure	Resourcing of selected warehousing
2.	Government to explore the provision of discounted export credit guarantees to support risky market search activities in SSA markets	Coordination	Resourcing of credit guarantee discounts
3.	Target the development of regional value chains for selected manufacturing sub-sectors, including clothing and textiles, food processing, medical instruments, and jewellery.	Coordination	Resourcing of regional engagements
4.	Negotiate continued market access advantages into the EU, US, and extend to Australasia	Coordination	None
5.	Explore the establishment of cost-effective warehousing in key developed economy markets to aid SME supply into these markets	Coordination, infrastructure	Resourcing of selected warehousing

Box 7: Export Promotion Strategy

Export of manufactured products has been the major driver behind the successful diversification of the Mauritian economy during the past 50 years. Increased Investment, employment creation and foreign exchange earnings have been the evident benefits.

However, the export figures for the past 15 years indicate the fragile export performance of the Textile and Clothing subsector and export growth in the case of smaller manufacturing sub-sectors, like articles for the conveyancing or packing of goods, of plastic, medical instruments, medicaments and pasta (para 2.5).

Major permutations are occurring in the Mauritian manufactured export destinations also. Export to France and the UK the two most important destination have dwindled while exports to regional markets like South Africa, Madagascar, and Kenya have improved. Moreover, Mauritian export-oriented manufacturers face the danger of being trapped in low value-added segments of value chains.Mauritius has to restore its competitiveness to be able to perform well on the export front.

Regional Export Strategy

- The growing exports to the Sub-Saharan Africa markets (via SADC and COMESA) represent considerable regional opportunities.
- The emergence of South Africa, Madagascar and Kenya as major export destinations is indicative of this trend.
- Many opportunities exist in the COMESA and SADC market (para 2.6.2 and Appendix B).
- Regional opportunities exist for some selected manufacturing sub-sectors (Appendix B) including textiles and clothing, food processing, medical instruments/ products, and jewellery.

Global Export Strategy

- Textiles and Clothing represents the major scalable global export opportunity. (para 4.4.3)
- The second major global export opportunity relates to food processing exports, namely fresh and processed fish exports
- Global export opportunities exist in traditional and new markets including EU, UK, USA, Asian and Australasia (para 4.4.3.1)
- Access to EU and AGOA markets should be maintained

Addressing industry foundations and Upgrading of value chains

To be able to respond positively to the above regional and global export strategies a sine qua non-condition is to address the issues relating to:

- Industry foundations: namely, skill development, labour market adjustments, certification for standards, and improvement of logistic infrastructure and
- Upgrading of value chain: namely, product diversification, process upgrading and higher value-added production.

CHAPTER 4

4.5. CREATION OF AN INDUSTRY 4.0 ECOSYSTEM THROUGH INCREASING DIGITAL AND GREEN INNOVATIONS

Industry 4.0 ecosystem

The existence of an Industry 4.0 ecosystem is a sine qua non condition for the development of a modern and competitive manufacturing sector. The vision of this important pillar of the proposed industrial policy frameworks is to establish an Industry 4.0 ecosystem.

Strategy 1: Creation of an Industry 4.0 ecosystem through increased digital and green innovations

Mauritius is presently not well-positioned to benefit from the rapid unfolding of digital technologies at a global level. This is primarily due to foundational weaknesses within the Mauritian socio-economic ecosystem, including distance from major sources of innovation; the lack of STEM skills; and the limited scale of the local (and regional) data market. Critically, though, foundations can be rapidly built to take advantage of these emerging technologies. This includes the development of Mauritius' data market, encompassing sovereignty over all data generated in Mauritius (i.e. securing national data storage, in addition to or even potentially as part of global cloud-based systems).

There is also the opportunity to extend this data reach regionally. Mauritius is well-positioned to locate itself as a regional data storage and platform systems management hub for SSA. As Africa's best-run country, Mauritius is well-positioned to guarantee the security of sensitive and commercially valuable private data on digital platforms.

This is key for the development of manufacturing servicification opportunities requiring both horizontal and vertical digital platforms and a physical value chain. As per the automotive example explored in Section 4.3.5, there may be opportunities for Mauritius to position itself as a hub for the platform component of cyber-physical regional value chains. There may be further opportunities to align this emerging industrial policy space, with the establishment of green economy credentials for Mauritian manufacturers. The environmentally sustainable cooling of data storage, for example, represents a potential opportunity.

The ability to develop digital and green innovations is partly dependent on the repairing of Mauritius' industrial foundations, and the effective utilisation of the three core recommendations falling into the industrial upgrading focus area (recommendations 8-10), but it also requires a focused institutional approach that is led by the proposed IP-EOC that explores the establishment of active experimentation between software and hardware innovators (both local and foreign). The value of many of the technology disruptors lies in their combinatorial opportunities, and it will be very difficult to identify these on an ex-ante basis. Having an appropriate incentive structure in place to encourage technological progress, while simultaneously exploring public-private sector opportunities appears an appropriate strategy to follow.

Recommendation 22
Establish a formal institutional process to explore Mauritian and regional cyber-physical platform development opportunities; and to then link these opportunities to established upgrading incentives.

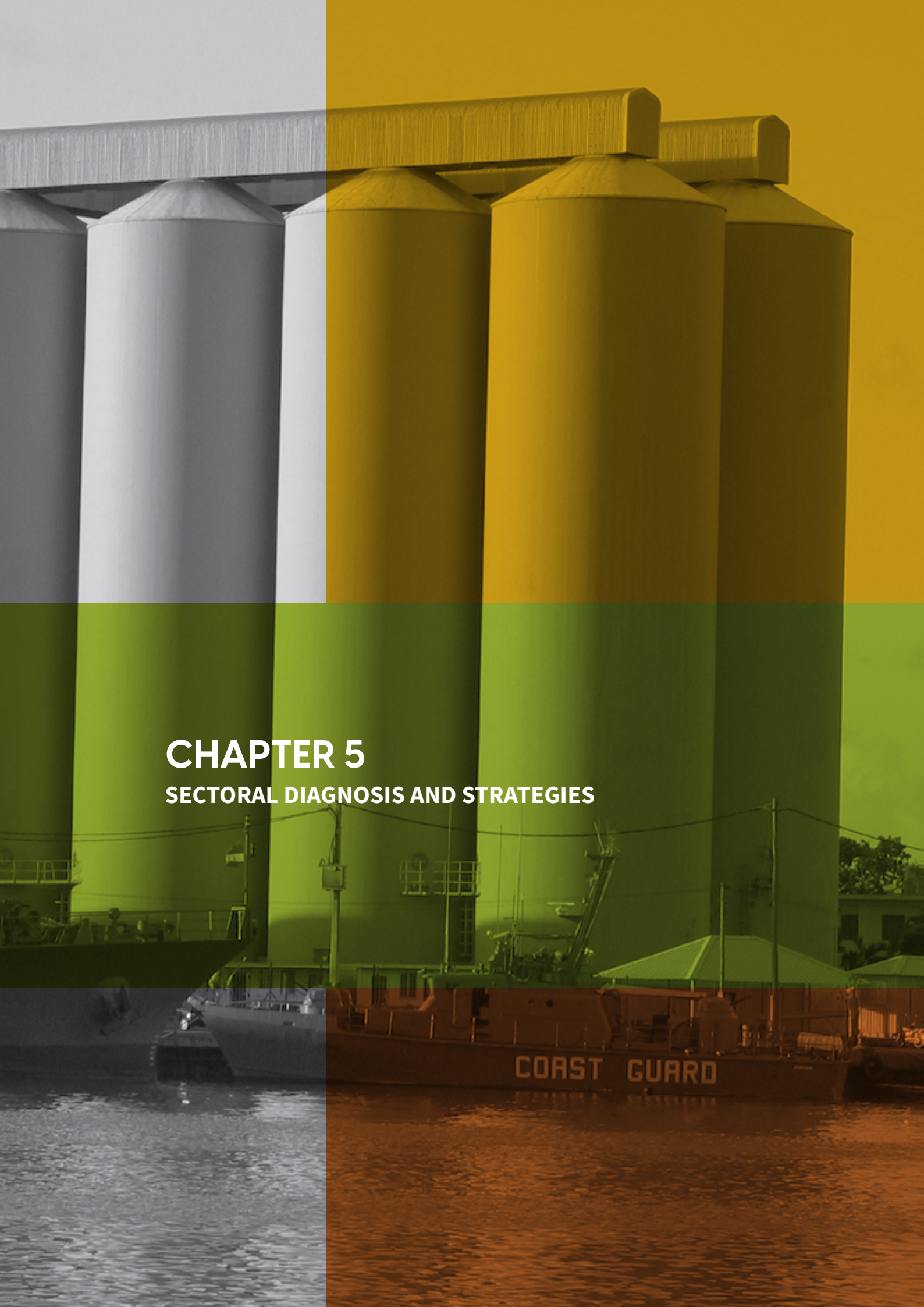
This approach emphasises the importance of data sovereignty for all data generated in Mauritius, the active exploration of data storage and platform systems management opportunities for SSA, the exploration of green economy solutions, and ensuring that digital and green economy technologies qualify for the upgrading incentives. In respect of "Industry 4.0" technologies, this relates to digitisation, digitalisation, big data storage and analysis, virtual reality, visual recognition, machine learning and artificial intelligence, additive manufacturing, use of nano-technology and smart materials, IOT and IIOT technologies, etc. In respect of green technologies, it relates to any physical or cyber investments that result in carbon emission reductions. These technologies need to be prioritised for support under the MUF and the MISF, as well as the TII wherever appropriate.

Courtesy: Natec

CHAPTER 4

Creation of an Industry 4.0 ecosystem though increased digital and green innovations

Strategy	Intervention area	Recommendation
Creation of an Industry 4.0 ecosystem though increased digital and green innovations	Digital and green innovations	Establish a formal institutional process to explore Mauritian and regional cyber-physical platform development opportunities; and to then link these opportunities to established upgrading incentives



CHAPTER 5

SECTORAL DIAGNOSIS AND STRATEGIES

CHAPTER 5

5. SECTORAL DIAGNOSIS AND STRATEGIES[9]

5.1. EOEs

Over the past decades, the Export Processing Zone (EPZ) Sector now known as Export-Oriented Enterprises (EOE) has been an engine of economic growth for the Mauritian economy, contributing to around 4.8% to GDP with a share of 36% in manufacturing. Exports by the Export-Oriented-Enterprises (EOE) represented 93.7 % of our manufacturing domestic exports and 63.8% of our total exports in 2019.

The EPZ dates back to 1970, when the Government adopted an outward export-led strategy with the enactment of the Export Processing Zone (EPZ) Act which offered a package of incentives and fiscal concessions such as tax holidays and duty-free imports on machinery and raw materials to investors to stimulate export-oriented manufacturing companies. This choice of strategy contributed largely to achieve the main objectives of wealth generation, creation of employment and increasing foreign earnings. In 1971, there were already 85 enterprises operating in the EPZ sector and employing some 650 workers. Textile and Clothing enterprises were the first enterprises to be set up in the EPZ mainly by investors from Hong Kong in addition to a few Mauritian enterprises. The EPZ has been primarily dominated by textile and clothing enterprises. The main export markets for our EPZ has been Europe due to LOME Cotonou Agreement and the USA on account of preferences under the AGOA. The success story of the Mauritian EPZ model has always been a subject of admiration and even replication.

Today, the EPZ sector has evolved from primarily a textile and clothing industry to include an array of non-textile products such as fish and fish products, jewellery, precious and semi-precious stones, diamonds polishing, medical devices, optical goods, watches and clocks (A diagnosis of these sub-sectors are unpacked below).

Main Indicators of EOEs

The major parameters of the EOE sector in terms of number of enterprises, growth rate, contribution to GDP, share in manufacturing, employment and exports are highlighted in the table below.

Table 17: Main indicators of the EOE Sector (2010-2019)

Main Indicators of the EOE Sector (2010-2019)										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Number of enterprises	370	352	330	309	300	284	282	280	263	239
Annual Real Growth Rate (%)	6.4	6.1	1.4	-3	2.5	-3.1	-5.1	0.3	-4.5	-5.6
Contribution of EOE to GDP (%)	6.3	6.2	6.2	6.2	5.9	5.8	5.2	4.9	4.6	4.3
Share in Manufacturing (%)	38.0	39.5	40.0	39.3	38.9	39.0	37.3	36.8	35.9	34.2
Employment	55,826	55,646	54,583	53,663	54,813	53,601	52,602	52,172	49,866	44,160
Exports (Rs. Billion)	41.62	43.10	45.61	46.78	49.07	48.49	44.42	43.03	43.31	42.52

Source: Statistics Mauritius
** provisional*

As shown in the above table, the number of enterprises in the EOE sector has decreased during the period 2010-2019, from 370 in 2010 to reach 239 in 2019. With regards to the annual real growth rate, it has known a significant drop from 6.4% in 2010 to -5.6% in 2019. The contribution of EOE to GDP has also contracted during the past decade, from 6.3% in 2010 to 4.3% in 2019. The same observation can be noted for the share of the EOE sector in manufacturing, starting from 38.0% in 2010 to 34.2% in 2019. A major decrease in employment has been observed during the period 2010-2019. In 2010, employment in the sector stood at 55,826 to fall to 44,160 in 2019.

9 Compiled by the Ministry Industrial Development, SMEs and Cooperatives (Industrial Development Division).

CHAPTER 5

Export Performance of the EOE

The table below depicts the total exports of the EOE sector, including the export performance of main activities such as textile and apparel, fish and fish preparations, jewellery, watches and clocks and optical goods.

Table 18: EOE Exports 2010-2019 (Rs. Billion)

EOE Exports 2010-2019 (Rs. Billion)										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Total EOE Exports	41.62	43.10	45.61	46.78	49.07	48.49	44.42	43.03	43.31	42.52
Total Textile & Wearing Apparel	24.44	25.67	25.17	25.22	26.45	25.78	24.29	22.86	22.80	22.36
Fish & Fish Preparations	8.18	8.10	10.81	11.62	11.09	9.55	10.21	10.92	10.66	9.84
Pearls, precious & semi-precious Stones	1.76	1.75	2	2.61	3.55	4.12	2.54	2.26	2.92	3.47
Jewellery, goldsmith & silversmith wares	1.79	1.50	1.77	1.61	1.45	1.48	1.20	0.60	0.57	0.51
Watches & Clocks	0.50	0.74	0.76	0.73	0.74	0.67	0.67	0.78	0.83	0.80
Optical Goods	0.20	0.26	0.30	0.22	0.25	0.25	0.23	0.26	0.27	0.31

Source: Statistics Mauritius
** provisional*

Exports in the EOE sector has known major upward and downward trends during the period 2010-2019. Exports in the sector which stood at Rs. 41.6 billion in 2010, continued on an upward trend to reach a peak of Rs.49.1 in 2014. As from 2015, exports followed a downward trend, registering a slight pickup in 2018. In 2019, exports stood at Rs. 42.5 billion. It is to be noted that within the EOE, during the 10 years period, exports of textile and clothing has decreased, fish and fish preparations have remained more or less stable, pearls, precious stones and semi-precious stones has registered a remarkable increase, while the jewellery, goldsmith and silversmith wares have experienced a contraction. Besides, exports of items such as Watches & Clocks and Optical Goods have known slight increases.

The main export markets of the EOE are United Kingdom (representing a share of 15.1 % of total EOE exports), USA (13.7 %), followed by South Africa (13.5 %), France (10.8 %) and Vietnam (6.0 %).

Strengths and Challenges

The strengths and challenges of the EOE sector are:

STRENGTHS

- Extensive experience acquired over 50 years
- Many operators have become global players
- Sector is serving reputed international clients and brands
- Production of high-end products and focus on niche markets
- Some companies have adopted state of the art infrastructure and updated technologies

CHALLENGES

- Elimination of trade preferences
- Shortage of local skilled labour and high dependence on foreign workers
- Rising cost of production including high labour costs and rise in the price of raw materials
- Rapid changes in consumer preferences
- Decrease in productivity
- Increased competition from low-cost manufacturers
- Limited basket of export products
- Low penetration in new and emerging countries, over concentration in traditional markets.
- Decrease in market orders.
- Difficulties in securing working capital loans due to heavy indebtedness vis-à-vis banks

CHAPTER 5

The strategies for sub-sectors of the EOE have been elaborated below.

5.2. DOMESTIC ORIENTED ENTERPRISES (DOE)

Domestic Oriented Enterprises (DOE) sector has always played a crucial role in our industrial development landscape. Indeed, after independence, to enable the country to diversify as a mono-crop economy and address the high unemployment rate prevailing at that time, Government adopted an import substitution strategy. The strategy aimed at encouraging the setting up of manufacturing enterprises which would cater for the needs of the local market. Since then, the industrial landscape of the countr y has been transformed with the coming into operation of large enterprises in sectors such as food, beverages, light engineering and, chemicals to name a few. Presently, the DOE has a share of 8.2 % in the overall economy and in 2018 it was employing some 19,837 workers. With the new configuration in the global trade arena and our commitment for tariff liberalisation, local products have to compete on the same level playing field with those from low-cost countries. Domestic enterprises are called upon to turn towards the export market for their survival.

Main Indicators of DOEs

The table below provides an overview of the DOE sector, depicting figures on gross output, number of enterprises, growth rate and employment.

Table 19: Main indicators of the DOE Sector

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross Output at Basic Prices (Rs. Billion)	53.4	58	60.4	67.9	72.8	72.9	74.1	75.6	
Number of enterprises	394	378	389	394	384	382	371	370	360
Annual Real Growth Rate (%)	-1.4	-2.4	2.8	10.2	1.3	2.2	3.8	2.2	4
Employment	20,389	19,444	21,311	21,433	20,113	19,846	19,290	19,582	19,837

Source: Statistics Mauritius, Digest of Industrial Statistics

During the period 2010-2018, the number of DOE enterprises has fallen, from 394 in 2010 to 360 in 2018. Employment in the DOE sector for the period 2010-2018 has followed a downward trend edging down from 20,389 in 2010 to 19,837 in 2018. Gross Output in the sector increased during the period 2010-2017: indeed, gross output which stood at Rs.53.4 billion in 2010 increased to Rs.75.6 billion in 2017. With regards to the annual real growth rate, in 2010 and 2011 negative figures were registered. However, a positive trend was noted as from 2012 and in 2014, a major drop-in growth rate was recorded. Growth rates picked up in 2015 and 2016 but decreased again in 2017. In 2018, it recorded a major rise with a rate of 4.5 %.

Strengths and Challenges

The strengths and challenges for the sector are:

STRENGTHS

- Extensive experience acquired over past decades
- Production of strategic goods like margarine, toothpaste, edible oil, noodles, pastas etc.
- Ensuring food security and supply of basic commodities

CHALLENGES

- Significant changes in consumer preferences for quality and eco-friendly products.
- High labour costs
- Rising price of raw materials
- Limited market size
- Financial constraints
- Threat from competing imports

Courtesy: Moroil

CHAPTER 5

Vision and Strategies

The Vision for the sector which is to optimise production for the local market and its Strategies have already been laid down in Section 4.3 on Optimising Production for the Local Market. The detailed matrix for its Plan of Action is at Appendix D.

5.3. TEXTILE AND CLOTHING

The textile and clothing industry has been an engine of economic growth in the Mauritian economy, contributing for about 53% of exports by the Export-Oriented Enterprises (EOE) sector and 36% of our total exports. The EPZ established in 1970 turned out to be successful mainly with the setting up of textile and clothing enterprises. Indeed, the first enterprises to be set up in the EPZ were mainly textile and clothing enterprises coming from some Hong Kong investors in addition to a few Mauritian enterprises. The main export markets were the USA and Europe. By the 1990s, the sector started experiencing an acute shortage of labour. This was supplemented with the importation of foreign labour from countries like India and China. The phasing out of the MFA in 2005 threatened our advantage of preferential market access to the EU by allowing production from other low-cost countries like India and China to enter the EU. This led to closures of major firms owned by Hong Kong nationals in the early 2000s, which resulted in major jobs losses.

The textile and clothing sector was encouraged to go for further vertical integration like spinning and weaving activities and to go up the market by moving away from the production of basic products. Some larger textile and clothing companies have now delocalised their production and set up production units in Madagascar, India, China and Bangladesh. Today, the sector has evolved from lower-end products to intermediary and higher market segments.

Main Indicators of Textile and Clothing

Table 20: Enterprises and Employment in the Textile and Clothing (Both EOE and DOE)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
No of Enterprises										
EOEs	175	171	158	145	140	132	131	129	121	107
DOEs*	75	74	72	70	63	60	43	42	42	41
Total	**250**	**245**	**230**	**215**	**203**	**192**	**174**	**171**	**163**	**148**
Employment										
EOEs	42,200	41,594	40,717	40,077	41,102	39,952	39,462	38,859	36,502	30,970
DOEs *	2,575	2,643	2,553	2,442	2,356	2,444	1,744	1,714	1,685	1,478
Total	**44,775**	**44,237**	**43,270**	**42,519**	**43,458**	**42,396**	**41,206**	**40,573**	**38,187**	**32,448**

**DOEs include only large establishments here.*
Source: Statistics Mauritius

The number of enterprises in the textile and clothing sector (covering both the EOE and DOE) has decreased significantly during the period 2010-2019 from 250 enterprises in 2010 to reach 148 in 2019. Employment also has been on a downward trend during the same period for both EOE and DOE sectors. In 2010 it stood at 44,775 while in 2019 it has decreased to 32,448.

Courtesy: RTKnits

CHAPTER 5

Table 21: Exports of Textile and Clothing sector

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Textile yarns, fabrics and made-up articles (Rs. Bn)	2.43	3.24	2.97	3.48	3.67	3.78	3.62	3.79	3.75	4.62
Articles of apparel (Rs. Bn)	23.94	23.87	23.92	23.35	24.65	25.73	23.46	20.80	20.89	19.50
Total	**26.37**	**27.11**	**26.89**	**26.83**	**28.32**	**29.51**	**27.08**	**24.59**	**24.64**	**24.12**

**provisional*
Source: Statistics Mauritius

During the period 2010-2019, exports of the textile and clothing sector experienced many ups and downs. Exports which stood at Rs. 26.37 billion in 2010 increased in 2011, but slightly decreased in 2012. In 2014 and 2015 exports picked up but as from 2016 exports kept decreasing to reach Rs.24.12 billion in 2019. It is to be noted that the exports of textile yarns, fabrics and made up articles has recorded a good performance since 2010, with figures almost doubling in 2019 compared to 2010.

Table 22: Main Export Markets of Textile and Clothing in 2019

Export Markets	Exports (Rs. Bn)	Export Share (%)
South Africa	5.8	24.1
United States	4.5	18.6
United Kingdom	3.7	15.5
Madagascar	2.2	9.1
France	1.7	6.9
Netherlands	1.1	4.5

Source: BIU

The main export markets for the textile and clothing sector are mainly South Africa, US, followed by UK, Madagascar, France and the Netherlands.

Processes and products

The main activities of the textile and clothing sector comprise the production of

- textile yarns and fabrics, which involve spinning, weaving, knitting and
- dyeing activities and the manufacture of wearing apparel.

As at December 2019, there were some 32 companies involved in the production of yarns and fabrics and about 112 companies were engaged in the manufacture of wearing apparel. The production of clothing remains a predominant activity of the EOE sector with the four main items being Shirts, T-shirts, Trousers and Pullovers/Cardigans which accounts for around 90% of the exports of the sector. Other items include swimwear, lingerie, and babywear. Many TC enterprises produce for famous brands such as Calvin Klein, Tommy Hilfiger, Next, Marks & Spencer, Woolworth, Edgars, Trueworth, J. Crew, Express, Eddie Bauer, Orvis, Guess and Diesel.

CHAPTER 5

Strengths and Challenges

The strengths and challenges of the T&C sector are:

STRENGTHS

- The T&C Sector has some-five decades of experience and has acquired sufficient expertise.
- Many of the enterprises have goodwill and earned the trust of buyers.
- The largest companies are sustaining competitiveness through adoption of state-of-the-art equipment, adoption of technology, creativity in design and ability to meet tight lead time to cope with shifting consumer preferences.
- Many of the large companies are producing high end products for niche markets. They are able to compete more on thebasis of non- price factors.
- Vertical integration by main groups is also contributing to enhancing their productivity and competitiveness

CHALLENGES

- Shortage of local skilled labour and high dependence on expatriates
- High labour costs
- Low productivity
- Lack of product diversification and reliance on four main items such as shirts, T-shirts, pullovers and trousers.
- Sector remains dependent on traditional markets in Europe and the US. The sector is still dependent of the Euro Zone and uncertainties of BREXIT.
- Rapid changes in consumer preferences for quality, eco-friendly and differentiated products demand adaptability of enterprises to stay in business, especially due to Covid 19 pandemic.
- Higher prices for inputs, and excessive dependence on four clothing items namely, T-shirts, Shirts, Pullovers and cardigans & Trousers remain major challenges.
- Geopolitical tensions

Vision and Strategies

Vision

The vision is to re dynamise the textile and clothing sector into a modern sector driven by technology, quality, fashion, sustainability and competitiveness and to position it as a major hub in the region. To achieve this vision, focus must be placed on human capital, creation of a conducive business environment, investment in technology, attraction of FDI and intensification of export promotion.

Box 8: The Model Factory

Excellence in business practices, this is the cry of the hour and the springboard for future generations in the manufacturing sector. The model factory is not a mere vision, but a reality exemplified by a company in Mauritius. The leadership of the factory is endowed with a multitude of virtues that cascade down to the production floor to make the factory profitable even in these difficult times.
The handling of the personnel and the labour force extends beyond the textbook formula and takes on a more humane approach. This no doubt boosts the loyalty of worker to the enterprise and increase overall efficiency.

Every section of the factory breathes innovation and sustainability. Indeed, the factory has been conceded on the principles of innovation and sustainability. It has already embraced some facets of Industry 4.0 and is already a reference for sustainable manufacturing.

The crux of this uniqueness is that the factory does not rely on external financial support but generates as far as possible its own financing. Yet the company is profitable.

The model factory does exist in Mauritius and it can be a source of inspiration for future manufacturing ventures that are set up in the country. It stands indeed as the culmination of excellence in businesses and the flagship of our manufacturing sector.

Strategies

This is translated into four strategies for the sector namely: -

- Strategic Objective 1: Develop adequate human capital in line with industry and market needs.
- Strategic Objective 2: Create a more enabling business environment for the development of the sector and promote FDI.
- Strategic Objective 3: Improve support services and access to technology and innovation for textile and clothing enterprises.
- Strategic Objective 4: Develop markets and strengthen export promotion efforts.

Strategic Objective 1: Develop adequate human capital in line with industry and market needs

Currently, the textile and clothing sector is constrained by a shortage of skilled labour, a high dependence on expatriates and low productivity. An important aspect of propelling the sector to new summits is to develop adequate human capital that shall respond to the industry and market needs. Such a strategy will be operationalized by enhancing skills development, facilitate the work permit process and improve labour productivity in the sector.

Strategic Objective 2: Create a more enabling business environment for the development of the sector and promote FDI

Another strategic orientation is to provide a real boost to the sector by creating a more enabling business environment to ultimately result in more investment and FDI. The key thrusts to attain this objective are facilitation in the supply of raw materials, introduction of financial schemes, encouraging sustainable production, improvement of port services, increase in institutional support, improvement in quality among enterprises, enhancement of the image of the sector and encouraging R&D in the sector.

Strategic Objective 3: Improve support services and access to technology and innovation for the textile and clothing enterprises

An important strategy to re-dynamise the sector is to facilitate the access of enterprises to technology and innovation. The sector is almost 50 years old and it will have to be reengineered by adopting the latest technology from countries leading in the sector, ensuring the availability of highly skilled experts to sustain this technology and easing the displacement of workers from low technology to high technology processes. (Linked with Repair of Foundation recommendations).

Strategic Objective 4: Develop markets and strengthen export promotion efforts

Markets are considered crucial for the survival and growth of the textile and clothing sub-sector. This strategic objective emphasises the necessity to improve market access locally and globally, step up the efforts to promote and diversify exports in traditional and emerging markets and improve the connectivity with these markets.

The detailed matrix of the Plan of Action operationalising these Strategic Objectives is listed at Appendix D.

5.4. FOOD PROCESSING & FISH PREPARATIONS

The Food and Fish Preparation sector is the second performing sub-sector after textile and clothing . It comprises processed agro-based foods (including sugar), sea-foods, animal feed, spirits and beverages. Mauritius is active in the production and export of processed foods such as fish and fish preparations, sugar, wheat flour, instant noodles and pre-cooked snacks. There are 18 companies engaged in export of processed foods while some 99 companies are focused on the local market.

Courtesy: Ferme Marine de Mahebourg

CHAPTER 5

Main Indicators of Food Processing and Fish Preparations

Table 23: No. of enterprises in Food Processing and Fish Preparations (EOE and NON-EOE)

Number of enterprises										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
EOE	**32**	**28**	**24**	**22**	**23**	**22**	**22**	**22**	**22**	**18**
(out of which Fish & fish preparations)	15	12	10	10	11	10	10	10	10	9
NON-EOE	**112**	**117**	**113**	**111**	**110**	**106**	**103**	**104**	**101**	**99**
(out of which Fish & fish preparations)	3	4	2	3	1	1	1	1	1	1
Total	**144**	**145**	**137**	**133**	**133**	**128**	**125**	**126**	**123**	**117**

Source: Statistics Mauritius

The number of enterprises in the Food and Fish preparations sector has significantly decreased during the period 2010-2019, starting with 144 enterprises in 2010 to reach 117 in 2019. It is to be noted that most of the enterprises are found within the non-EOE sector.

Table 24: Employment in Food Processing and Fish Preparations

Employment										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
EOE	**4,955**	**4, 699**	**4,759**	**4,845**	**5,384**	**5,272**	**5,323**	**5,444**	**5,283**	**5,180**
(out of which Fish & fish preparations)	4,250	4,341	4,275	4,387	4,695	4,660	4,696	4,785	4,811	4,788
Non-EOE	**9,208**	**9,208**	**9,431**	**9,431**	**9,800**	**9,793**	**8,708**	**8,936**	**9,211**	**9,008**
(out of which Fish & fish preparations)	161	176	141	167	47	65	65	65	64	64
Total	**13,458**	**13,549**	**13,706**	**13,818**	**14,495**	**14,453**	**13,404**	**13,721**	**14,022**	**13,796**

Source: Statistics Mauritius

Employment in the sector has more or less remained stable during the past decade. In 2010, employment stood at 13,458 and by 2019, employment stood at 13,796. It is to be noted that most employment is within the non-EOE sector.

Table 25: Exports of Food Processing and Fish preparations

EXPORTS (Rs. Billion)										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Exports	**18.5**	**18.6**	**21.7**	**23.9**	**21.5**	**18.5**	**21.0**	**21.8**	**18.2**	**19.0**
(out of which fish & fish preparations)	8.2	8.1	10.9	11.9	11.1	8.9	10.2	10.9	10.7	9.8
(out of which sugar & sugar preparations)	**8.2**	**8.4**	**8.5**	**9.7**	**7.9**	**7.2**	**8.3**	**8.5**	**5.0**	**6.8**
(out of which Fish & fish preparations)	161	176	141	167	47	65	65	65	64	64

Source: BIU

Exports in the sector have been rather fluctuating during the period 2010-2019: exports which stood at Rs 18.5 billion in 2010 attained its peak in 2013. However, in 2014 and 2015, exports decreased significantly to pick up in 2016 and 2017. In 2018, exports again experienced a drop but recovered in 2019 to reach Rs 19 billion.

CHAPTER 5

Table 26: Main Export Markets of fish and fish preparations in 2019

Export Markets (Rs. Mn)	Rs Bn	Export share (%)
United Kingdom	2.6	19.4
Spain	1.8	13.4
Italy	1.6	11.9
Netherlands	1.3	9.7
Japan	1.1	8.2
France	0.8	6.0

Source: BIU

The main export markets of the sub-sector remain the UK as the number one destination, followed by Spain, Italy, Netherlands, Japan and France. Exports in the sector are dominated by fish preparations and sugar.

Strengths and Challenges

The strengths and challenges for the Fish and Fish preparations sector are:

STRENGTHS

- Potential for vertical integration in the agro-processing industry
- High value-addition can be created in the food sector
- Some experienced acquired during past decade in the food sector (e.g. processed agro-based food including sugar).
- Reputed international research institutes in the sugar sector
- Availability of skilled planters

CHALLENGES

- Difficulty in fish supply and in sourcing good quality of fish food.
- Shortage of skilled labour and high dependence on technical/ managerial expatriates, particularly in the seafood sub-sector.
- Difficulty in retaining qualified and trained people.
- Lack of technical skills (e.g. handling refrigeration equipment in cold-rooms/storage, etc.).
- Rising costs of production (e.g. wages, utilities, permits, rental).
- Difficulty in sourcing of raw materials for agro-processing industries.
- Manufacturers of processed foods not able to meet stringent regulations and food standards in terms of safety and quality to qualify for exports.
- Fierce competition from international players in the processed food industry.
- Unfair competition with imported products which very often do not meet quality standards
- Lack of innovation to upgrade value addition
- Lack of recycling of seafood and food waste.

Vision and Strategies

Vision

The vision for the sector, which covers mainly food processing and fish preparations, is to become an important pillar of the economy with focus on food security, sustainable use of locally available resources and high skilled employment.

CHAPTER 5

Strategies

This is translated into three strategies for the sector namely

- Strategic Objective 1: Enhancing the capacity of the sector
- Strategic Objective 2: Upgrade technological capabilities and improve access to finance
- Strategic Objective 3: Improve export promotion and market diversification

Strategic Objective 1: Enhancing the capacity of the sector

Some of the constraints faced by enterprises in the sector relate to the sourcing of raw materials, shortage of skilled technicians and deficiency in infrastructure with regards to waste disposal and recycling. To address these constraints, the first strategic objective focuses on enhancing the production and supply of agro and fish products, ensuring sustainability of tuna supply for processing, development of skills, enhancing the image of the sector, enhancement of institutional support and development of appropriate infrastructure in the sector.

Strategic Objective 2: Upgrade technological capabilities and improve access to finance

Lack of innovation and low investment in the sector have been identified as major constraints impeding the development of the sector. In this perspective, the second strategic objective emphasises on fostering innovation, improving access to finance and promotion of investment, research and innovation in the sector.

Strategic Objective 3: Improve export promotion and market diversification

Exports of products in this sub-sector are crucial for its growth. It is therefore important that emphasis is laid on how to boost our exports and at the same time expand our market base. In this line, this third strategic objective focuses on intensification of our exports and improving market access.

The detailed matrix of the Plan of Action operationalising these Strategic Objectives is listed at Appendix D.

5.5. MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)

The Medical Devices sub-sector in Mauritius comprises five export-oriented enterprises and one domestic-oriented enterprise. The products include Cardiovascular balloon, catheters, other devices for cardiovascular surgery and oncology, silicone implants, ophthalmic prosthesis, dental prosthesis, artificial teeth, dental fillings and bone substitutes. These enterprises export mainly to France and India. The sector which employs around 769 workers exported for some Rs 1.1 billion in 2019.

Main Indicators in the Medical Devices, Pharmaceuticals and Medical Products

Table 27: Enterprises, Employment and Exports in Medical Devices

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Enterprises										
EOEs	5	4	4	3	4	4	5	5	5	5
DOEs						1	1	1	1	1
Total	**5**	**4**	**4**	**3**	**4**	**5**	**6**	**6**	**6**	**6**
Employment										
EOEs	288	351	396	394	440	462	524	567	635	769
DOEs						12	9		11	13
Total	**288**	**351**	**396**	**394**	**440**	**474**	**533**	**567**	**646**	**782**
Exports (Rs.bn)	**0.51**	**0.7**	**0.82**	**0.73**	**0.54**	**0.55**	**0.68**	**0.71**	**0.88**	**1.1**

**provisional*
Source: Statistics Mauritius

The number of enterprises in the Medical Devices sub-sector has remained almost the same during the period 2010-2019. In 2019, there were 6 enterprises, out of which one is domestic-oriented. Employment in the sector has consistently been on a rising trend, with 288 people employed in 2010 to reach 782 in 2019. Exports as well have increased exponentially during the period 2010-2019.

In 2010, exports which stood at Rs.0.51 billion continued to increase until 2012. A drop was noted in 2013 and 2014. As from 2015, exports have continued to rise significantly to reach Rs. 1.1 billion in 2019.

Table 28: Main Export Markets of Medical Devices in 2019

Export Markets	Exports (Rs. Mn)	Export Share (%)
France	663.3	54.3
India	376.3	30.8
United States	60.1	4.9
Iran	36.6	3.0
Germany	27.5	2.2
France	0.8	6.0

Source: BIU

France and India remain the most important export destinations, followed by the US, Iran and Germany.

Table 29: Enterprises, Employment and Exports in Pharmaceutical sub-sector

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Enterprises										
EOEs	2	2	2	2	2	2	2	2	2	2
DOEs	1	1	1	1	1	1	1	-	-	-
Total	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**2**
Employment										
EOEs	61	67	62	61	63	68	67	64	66	67
DOEs	55	34	34	32	32	35	35	-	-	-
Total	**116**	**101**	**96**	**93**	**95**	**103**	**102**	**64**	**66**	**67**
Exports (Rs.bn)	**N/A**	**0.87**	**3.19**	**2.06**	**1**	**1.2**	**1.18**	**1.16**	**1.18**	**1.15**

**provisional*
Source: Statistics Mauritius

Courtesy: Natec

The number of enterprises in the pharmaceutical sub-sector, has more or less remained the same during the period 2010-2019. There was one company in the DOE sector during the period 2010-2016, but it ceased operations as from 2017. As at now, there are only 2 enterprises. Employment has decreased from 116 persons in 2010 to 67 persons in 2019.

Exports have increased significantly during the period 2011-2019. Exports which stood at Rs.0.87 billion in 2011, increased exponentially in 2012. A drop was noted in the years 2013 and 2014. However, exports picked up during the period 2015-2019, except for a fall observed in 2017 and 2019.

CHAPTER 5

Strengths and Challenges

The strengths and challenges for the Medical Devices sub-sector are:

STRENGTHS

- Growing demand for medical devices around the world
- Some experience in medical devices already acquired during the last ten years
- Mature IT infrastructure in Mauritius
- High export potential
- Versatile Mauritian labour force
- State of the art technology already adopted for some activities
- Sector is dominated by leading industry players from Europe and US.

CHALLENGES

- High dependence on imports of raw materials
- National Quality Infrastructure not up to international standards
- Shortage of skilled labour
- Strong skills mismatch between industry and educational system as there is no dedicated medical devices curriculum at universities
- Clinical trials for medical devices are not allowed in Mauritius
- Inadequate protection of intellectual property, patents and brand protection
- Limited exports markets
- Restrictive and cumbersome regulations and procedures in place for medical devicesproduct enter the domestic market

Vision and Strategies

Vision

The vision for this sector which covers Medical Devices as well as Pharmaceuticals and Medical Products is to become a competitive and innovation-based high-tech sector driven by a solid thrust for excellence. In order to achieve this vision, the sector will have to be given a boost, through a proper legal framework and other support in key areas.

Strategies

This is translated into five strategies for the sector namely:

- Strategic Objective 1: Develop an enabling legal and regulatory framework for the sector.
- Strategic Objective 2: Boost the organization of the sector and encourage integration and collaboration.
- Strategic Objective 3: Develop appropriate skills and competencies and foster research and innovation.
- Strategic Objective 4: Provide a more enabling business environment for the development of the sector and to facilitate FDI inflow.
- Strategic Objective 5: Develop markets and strengthen export promotion efforts.

Courtesy: Natec

CHAPTER 5

Strategic Objective 1: Develop an enabling legal and regulatory framework for the Medical Devices sector

An important strategic objective for the sector is to develop an appropriate legal and regulatory framework specific to the sector. Some steps have been taken, but more efforts have to be put to allow the sector to take off. To implement these strategies, the Steering Committee set up to monitor this sector has to be re-dynamised to follow on all actions to be taken.The National Quality Infrastructure (NQI) should also raise its level to international standards, otherwise, the sector will not thrive. The Government in the Budget 2020-2021 has earmarked funds to upgrade the NQI. These projects should be implemented as a matter of urgency as they could unlock the potential of the sector and create investment opportunities. It is essential to upgrade and strengthen the different support institutions in line with international practices.

Strategic Objective 2: Boost the organization of the sector and encourage integration and collaboration

This second strategic objective seeks to boost the development of the sector in Mauritius by ensuring that the proper infrastructure is put in place and the right operators identified. Budget 2020-2021 has also earmarked important funds to develop this sector, especially the pharmaceutical sector. The concept of pharmaceutical village has to be reviewed and re-formulated to this effect. Another area to be addressed to attain this objective is to establish synergies with all support institutions.

Strategic Objective 3: Develop appropriate skills and competencies and foster research and innovation

To increase the potential for product diversification and ensure the sustainability of the industry, much importance will have to be given to the building of knowledge and generation of necessary research. To achieve this objective focus should be on the alignment of the education infrastructure with the requirements of the industry by engaging discussions between sector professionals, research and academia and by gradually translating the industry needs into academic offerings. In addition to boost innovation, specific R&D programmes targeting different parts of the sector should be elaborated and studies to upgrade research infrastructures in the country be initiated. It is equally important that the measures aimed at boosting innovation obtain the appropriate level of intellectual property protection.

Strategic Objective 4: Provide a more enabling business environment for the development of the sector and to facilitate FDI inflow

The sector which dates back to some years has been stable in its development. It has not registered many new entrants. The business environment is, therefore, a critical factor for the expansion of the sector as it plays a key role in the manufacturers' investment decision-making process. Significant efforts should, therefore, be made to create a more enabling environment for the sector and to promote foreign and domestic investment.

To operationalise this strategic objective, it is important that the awareness exercise carried out among relevant officers to ease procedures, especially in the import and health compliance segments be maintained. Another component under this strategic objective is to create a more enabling business environment, through incentives. Budget 2020-2021 has granted several incentives for the sector and these incentives need to be implemented. In addition, financial institutions need to be made aware of the potential of the sector to ensure easy and timely access to finance for businesses. Attention should also be given to improving the quality of the support provided by support institutions to prospective foreign direct investors.

Strategic Objective 5: Develop markets and strengthen export promotion efforts

This strategic objective is meant to ensure greater market access for the Mauritian manufacturers, including easing entry conditions to the domestic market. In order to make the sector more known internationally, a key step is to ensure structured export development and promotion efforts. Market opportunities exist for the sector, particularly, with booming demand from BRIC countries, but customs duties and taxes imposed by key trading partners on Mauritian exports affect the competitiveness of the industry and impede export development.

The detailed matrix of the Plan of Action operationalising these Strategic Objectives are listed at Appendix D.

Courtesy: Natec

CHAPTER 5

5.6. JEWELLERY & RELATED ARTICLES

Jewellery is the third-largest subsector after textile and clothing and fish and fish preparations. It comprises both export-oriented and domestic-oriented enterprises. The main products in the sector comprise mostly of pearls, precious/ semi-precious stones, and jewellery, goldsmith & silversmith wares. The jewellery export sector comprises 12 large enterprises employing 991 workers and includes enterprises involved in cutting and polishing of diamonds as well as other precious stones such as sapphire, ruby and emerald. Some enterprises are producing imitation jewellery from base metal and other materials such as plastic, glass, shell, wood, artificial pearls and beads. The domestic-oriented jewellery sector consists of 10 large enterprises and employing some 225 workers. (According to the Assay Office,in the domestic-oriented jewellery sector, there are 590 registered jewellers, including 425 manufacturers, employing some 2,124 workers. These jewellers supply mainly gold and silver jewellery such as rings, necklaces, bracelets, and other ornaments to domestic clients.)

Main Indicators in Jewellery and Related Articles

Table 30: Enterprises and Employment in Jewellery and Related Articles

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Enterprises										
EOEs	32	26	19	17	15	15	14	14	13	12
DOEs*	12	19	17	15	13	11	14	14	9	10
Total	**44**	**45**	**36**	**32**	**28**	**26**	**28**	**28**	**22**	**22**
Employment										
EOEs	1,457	1,311	1,156	1,253	1,254	1,321	1,067	1,029	997	991
DOEs *	284	738	693	456	241	236	288	275	212	225
Total	**1,741**	**2,049**	**1,849**	**1,709**	**1,495**	**1,557**	**1,355**	**1,304**	**1,209**	**1,216**

**DOEs include only large establishments here.*
Source: Statistics Mauritius

The number of enterprises in the jewellery sector has been on a decreasing trend over the period 2010-2019. In 2010, there were 44 enterprises and this figure has decreased significantly to reach 22 enterprises in 2019. Out of the 22 enterprises, 12 are export-oriented. Employment has also been on a downward trend: falling from 1,741 in 2010 to 1,216 in 2019.

Table 31: Exports of Jewellery and Related Articles

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Jewellery, goldsmiths' & silversmiths' wares (Rs. Bn)	2.08	1.82	1.88	1.67	1.52	1.54	1.29	0.65	0.64	0.56
Pearls, precious & semi-precious stones (Rs. Bn)	1.83	1.8	2.03	2.7	3.61	4.18	2.6	2.36	2.93	3.5
Total Exports in Jewellery sector (Rs. Bn)	**3.91**	**3.62**	**3.91**	**4.37**	**5.13**	**5.72**	**3.89**	**3.01**	**3.57**	**4.06**

**provisional*
Source: Statistics Mauritius

Exports, in the jewellery sector, has experienced an average increase of around 3.8% over the period 2010-2019. This rise is mostly dominated by exports of pearls, precious & semi-precious stones. During this period exports peaked in 2015.

CHAPTER 5

Table 32: Main Export Markets of Jewellery and Related Articles in 2019

Export Markets	Exports (Rs. Bn)	Export Share (%)
Vietnam	2.51	63
Belgium	0.46	11
USA	0.42	10
Switzerland	0.32	8
France	0.20	5

Source: BIU

The main export markets of the sector are Vietnam, followed by Belgium, the USA, Switzerland and France. The export enterprises supply clients in Europe and the U.S, largely through their parent companies. One of the major enterprise exports semi-polished diamonds to Vietnam for further processing which are then re-exported to the parent company in Europe. The total exports of the three main foreign companies account for more than 85% of the total exports of jewellery in the EOE sector.

Strengths and Challenges

The strengths and challenges for the sector are:

STRENGTHS

- Quality and craftsmanship as well as high quality service, reliability and flexibility, quick reactivity as well as short production lead time for highest quality jewellery products
- Ability by many Export-Oriented Enterprises to perform highest quality processing for the pear, marquise, oval, brilliant, round and princess shapes diamonds, among others
- Ability to export to renowned retailers such as Leo Schachter and Tiffany
- Exports effected to France, Belgium, US, Italy, UK and Australia, among others.

CHALLENGES

- Lack of local expertise in key production areas including, stone setting and designing
- Skills mismatch in the sector
- Unavailability of expertise (especially engineers) for maintenance of machine/equipment used in the manufacture of jewellery
- High labour cost compared to Asian countries
- Cutting-edge technology not fully adopted by major companies as they are too costly to purchase
- Lack of market intelligence among small and medium sized jewellers
- Insufficient knowledge of trend and design in the sector, particularly among small and medium sized jewellers
- No adequate visibility of Mauritius as a production base for jewellery
- Sales to tourists has not been adequately tapped
- Exiguous domestic market
- Inadequate access to finance
- Competition from low-cost countries (cheap imports from China)
- Barriers to entry in the global jewellery market
- Price volatility of raw materials
- Remoteness from international markets

CHAPTER 5

Vision and Strategies

Vision

The vision is to steer the jewellery sector into new skills, innovation and technology growth path and embedding of innovation and technology. To realise this vision, the sector needs to be re-engineered to focus on skills development, support and technology and export promotion.

Strategies

This is translated into three strategies for the sector namely: -

- Strategic Objective 1: Develop adequate human capital in line with industry and market needs.
- Strategic Objective 2: Improve support services and access to technology and innovation for jewellery enterprises.
- Strategic Objective 3: Strengthen visibility and recognition of Mauritian jewellery on international markets.

Strategic objective 1: Develop adequate human capital in line with industry and market needs

The major challenge faced in the jewellery sector is the unavailability of skilled labour in certain specialised field of activities. In this line, the first strategy emphasises the development of adequate human capital which will match the industry needs. The focus areas will be the upgrading of provision of training for the sector, enhancement of the quality of training at the level of enterprises and the recruitment of foreign labour will be facilitated.

Strategic objective 2: Improve support services and access to technology and innovation for jewellery enterprises

The competitiveness of the jewellery sector has been hindered mainly by low uptake of technology. To address this technology constraint, the second strategic objective aims to support development of the sector, improve coordination and communication, promote investment and diversification, improve access to finance in the sector and the development of a jewellery cluster.

Strategic objective 3: Strengthen the visibility and recognition of Mauritian jewellery in international markets

Mauritius is still being recognised as a small player in jewellery products. To strengthen the visibility of the jewellery sector in the international market, this third strategic objective is to focus on improving product design and compliance, delivery time, encourage product diversification, leverage branding for better product positioning, increasing compliance with standards and intensifyexport promotion efforts and market information.

The detailed matrix of the Plan of Action operationalising these Strategic Objectives are listed at Appendix D.

5.7. OTHER MANUFACTURING SECTORS

The other sub sectors which are covered here are watches and clocks, optical goods, leather and footwear, chemicals, wood and paper products, toys and electric and electronic products. The table below depicts the number of enterprises, employment and total exports in these sectors.

Table 33: Main indicators of other sub-sectors in the manufacturing sector

Sectors	Number of enterprises (2019)	Employment (2019)	Total Exports	
			2015	2019[1]
Watches and clocks[2]	5	565	0.74	0.81
Optical goods	5	518	0.27	0.32
Leather, Footwear and Related products[3]	11	760	0.72	0.78
Chemicals	33	2,313	3.30	3.07
Wood and paper products[4]	23	874	0.23	0.38
Toys	2	208	0.27	0.21
Electric and Electronic products[5]	12	382	0.62	0.46

Source: Statistics Mauritius and BIU

[1] provisional

[2] It also includes leather bracelets and watch straps.

[3] The sector includes leather products (SITC Div.61), footwear (SITC Div.75) and travel goods, handbags and containers (SITC Div. 83) but excludes leather bracelets and watch straps.

[4] Sectors include products, namely wood (SITC Div. 63), paper products (SITC Div. 64) and office stationery (SITC Div. 895).

[5] It excludes medical devices and watches and clocks but includes mainly electric and electronic products (SITC Div. 77)

CHAPTER 5

The Watches and clocks sector consists of 5 companies which are all export-oriented. The main activities in the sector are assembly of watches, dial plates and components.

The Optical goods sub-sector comprises 2 companies in the EOE specialising in the export of sunglasses, spectacles and frames, and 3 enterprises in the Non-EOE sector involved in ophthalmic lenses.

With regards to the Leather sector, Mauritius has only one tannery supplying hides to more than 20 SMEs across the island. These enterprises cater mainly to the local market and manufacture goods such as handbags, purse, wallets, cardholders, footwear and other related products. The export manufacturing enterprises, on the other hand, produce high valued products for the export market.

The Chemical sub-sector in Mauritius acts as a support industry to several Mauritian activities facilitating the provision of chemical raw materials used in the manufacturing of high-end products such as textiles, leather, paper and paint amongst others. Out of a total of 33, six enterprises are geared towards exports.

The Wood and Paper products sub-sector consists of carton boxes and paper processing operators, manufacturers of stationery, furniture and ship models amongst others. Out of a total of 23, ten of those companies are geared towards exports, while the remaining cater mostly for the local market. The Toys sub-sector in Mauritius is a low-growth industry which is subject to a highly fragmented retail channel of distribution. There are 2 companies engaged in export of toys such as plush toys, dolls and miniature cars.

The Electric and Electronic products sub-sector comprises manufacturers of electrical products such as cables, switches, plug lighting, assembly of testers, meter board, hygrometers and pumps and of Electronic products such as starters, dimmers, controls and cable looms. There are presently 12 companies, of which 5 are export-oriented ones.

Strengths and Challenges

These sectors have remained stable over the last ten years with some sub-sectors displaying a high level of precision engineering and maturity in different stages of their value chains. Their Strengths and Challenges are as follows:

STRENGTHS

- Extensive experience acquired over the years
- High level of precision engineering in some sectors, for e.g. watches and clocks, optical goods
- Potential export markets for some items
- Versatile and highly educated labour force

CHALLENGES

- Low intake of technology in some sectors
- Lack of skilled labour
- Limited market access for these products
- Low inflow of FDI in these sectors

The strategies for these sub-sectors are covered in the cross-sectoral strategies related to Industry Foundations and other elements of the Industrial Policy Framework.

CHAPTER 5

5.8. SMEs

According to Statistics Mauritius, a small firm is defined as employing less than 10 persons. On the other hand, according to the Small and Medium Enterprises Act 2017, a small enterprise is defined as having turnover more than Rs. 2 million but less than Rs. 10 million, whereas for a medium enterprise, turnover hovers between Rs. 10 million to Rs. 50 million. The number of SMEs stood at 138,600 as per the Census of Economic Activities of 2018. In 2019, SMEs accounted for around 49% (284,574) of total employment and generated about 36% (Rs 156 Million) of Gross Value Added. Most of the SMEs are engaged in wholesale and retail, transportation, accommodation and food services activities. As per the Census of Economic Activities on Small Establishments 2018 (Statistics Mauritius), it is to be noted that around 13 of the SMEs are involved in manufacturing activities (that is, 18,187 enterprises).

Table 34: Employment in SME sector

Employment	2013	2014	2015	2016	2017	2018*	2019*
Manufacturing (SMEs)	34,255	35,930	36,790	36,064	35,141	34,123	37,162
Total SMEs	264,920	269,025	276,625	277,620	281,612	277,972	284,574
Share of manufacturing employment in SMEs employment (%)	12.9	13.4	13.3	13.0	12.5	12.3	13.1

**provisional*
Source: Statistics Mauritius

As shown in the table above, employment in manufacturing has been increasing during the period 2013-2019. In 2013, employment stood at 34,255 to reach 37,162 in 2019. The share of manufacturing employment in the SME sector accounted for 13.1% of the total employment in SMEs for 2019.

Table 35: Value Added of SMEs (Rs. Million)

Value Added	2013	2014	2015	2016	2017	2018*	2019*
Manufacturing	14,570	13,011	13,010	13,198	14,755	15,356	16,500
Value added of SMEs	**114,094**	**116,191**	**118,110**	**128,161**	**137,169**	**148,181**	**156,037**
Contribution of manufacturing to value added of SMEs (%)	12.8	11.2	11.0	10.3	10.8	10.4	10.6

**provisional*
Source: Statistics Mauritius

In respect of value-added of SMEs, the manufacturing segment stood at Rs. 14,570 million in 2013 to reach Rs. 16,500 million in 2019. The contribution of manufacturing to the value-added of SMEs sector stood at 10.6% in 2019.

Strengths and Challenges

Some of the strengths and weaknesses of the sector are:

STRENGTHS

- Rich pool of experienced entrepreneurs
- Well established SME institutions
- Favourable business climate with several incentives/ schemes to give a boost to SMEs
- Favourable trade agreements
- Strong government commitment to develop the sector

CHALLENGES

- Lack of technical skills to diversify range of products
- Lack of investment to embark on digitisation process
- Access of finance to be improved
- Lack of market intelligence
- Overdependence on imported raw materials
- Unfair competition from imported products

CHAPTER 5

Vision and Strategies

Vision

The vision for the whole sector as laid down in the 10 - Year Master Plan For The SME Sector in Mauritiusis "SMEs as the Engine of Growth to Position Mauritius as a High-IncomeEconomy" by 2026. In order to attain this vision, the 10 - Year Master Plan Plan focuses on Improving SME competitiveness and growth; Fostering high growth potential SMEs; Upgrading skills and job opportunities; Improving design and value addition by supporting SMEs and Increasing market access and exports

The vision for the Manufacturing SME's is embedded in the new vision crafted by the IPSP for the manufacturing sector in Chapter 3. As such the IPSP does not come into contradiction with the SME Master Plan. This is so because the manufacturing SMEs is a sub-sector which is present in the overall manufacturing sector covered in the IPSP report. The Industry Foundations and the other elements of the Industrial Policy Framework (Chapter 4) apply equally to the manufacturing SMEs.

Strategies

The various strategies that have been enunciated in this IPSP report for the manufacturing sector including the sub-sectors which are relevant to the Manufacturing SMEs sub-sector have been encapsulated below:

- Strategic Objective 1: Develop adequate human capital in line with industry and market needs
- Strategic Objective 2: Provide adequate infrastructure for the manufacturing sector, including SMEs
- Strategic Objective 3: Upgrade technological capabilities and develop new products
- Strategic Objective 4: Improving Access to Finance
- Strategic Objective 5: Improving Marketing and Regional Exports Capacity

Strategic Objective 1: Develop adequate human capital in line with industry and market needs

The development of human capital to respond to the exact needs of the market is vital in boosting the sector. The proposed skills development roadmap will ensure the upliftment of STEM (Science, Technology, Engineering, and Mathematics) capabilities among the SME's as well. This strategy also covers the upgrading of vocational training and training at enterprise level more prominently in the food fish processing and jewellery sectors.

Strategic Objective 2: Provide adequate infrastructure for the manufacturing sector, including SMEs

The second strategy ensures that manufacturing SME's are provided with the appropriate industrial building and land. The recommendation that manufacturing enterprises benefit from facilities for the disposal of industrial waste would also generate many business opportunities for SMEs. Such a strategy includes also the development of a jewellery cluster to provide different facilities to small jewellery manufacturers.

Strategic Objective 3: Upgrade technological capabilities and develop new products

Another strategy that emerges as an important pillar to boost the manufacturing SME's hinges on the drive to upgrade technological capabilities through innovation, modernising production capabilities, upgrading the quality of products and producing a new range of products, namely FMCG products. This would be supported by strong institutional support and an appropriate system of data collection.

Strategic Objective 4: Improving Access to Finance

The fourth strategy that would propel SME manufacturing to higher development pedestal is that of improving their access to finance. The three schemes created, namely the Manufacturing Upgrading Fund, the Modernisation Investment Support Fund and the Technology Innovation Incentive would facilitate product and process diversification, shift to higher value-added production, technology upgrading and R&D activities.

Strategic objective 5: Improving Marketing and Regional Exports Capacity

The other important strategic objective that will bring about a new boost to the sector is to improve the capacity of manufacturing SMEs in terms of marketing and exports. In line with the strategy for the whole manufacturing sector, SMEs will explore the regional and global export opportunities in selected products, will benefit from the warehousing projects as well as the capacity building in export readiness. In order to situate the position of the SME manufacturing sub-sector in this IPSP report, the different Strategic Objectives and instruments which are relevant to the SME manufacturing sub-sector have been summarised in the Action Plan at Appendix D.

CHAPTER 6
CONCLUSION: STRATEGIC PRIORITIES

Courtesy: Natec

CHAPTER 6

6. CONCLUSION: STRATEGIC PRIORITIES

This industrial policy report contains a wide range of recommendations to support the growth and development of Mauritius' industrial capacities and capabilities. These recommendations are intended to support the realisation of Mauritius' Vision 2030, which is the achievement of high-income status, supported by a highly productive manufacturing sector contributing a quarter of the country's GDP. The 22 recommendations made are summarised in Table 36, which also identifies each of the recommendations as either coordination, infrastructure or incentive based. In certain instances, a specific recommendation is both coordination and infrastructure based. This occurs where a recommendation requires an investigation before appropriate infrastructure can be identified. Infrastructure and coordination recommendations do not have indicative budgets, with the expectation that they are covered under an existing budget that may need to be tweaked or adjusted to accommodate the proposed interventions.

Importance of Institutional approach

While a wide range of recommendations are presented in Table 36, it is important to re-emphasise the centrality of an institutional approach to Mauritius' industrial policy development and deployment. The primary recommendation that takes precedence over the 22 recommendations made is the establishment of an Industrial Policy Executive Oversight Committee that reports to the Ministry of Industrial Development, SMEs and Cooperatives, and that is responsible for monitoring and evaluating the realisation of the strategy over its lifespan. The participation of other stakeholders in the implementation of the Plan is also necessary.

Growth targets

The annual GVA and productivity growth targets presented in Figure 6 and Figure 7 respectively should be the guiding framework within which the impact of the various recommendations are assessed. Where the recommended infrastructure, coordination interventions, and incentives are clearly delivering on the growth rates required and represent demonstrated value to both the government and private sector they should potentially be expanded; and where they are falling short, it is essential that they are reviewed, and either remedied or replaced. As articulated, Mauritius is at a structural crossroads. If manufacturing and the broader industrial sector are central to the national project of sustaining high income status by 2030, an innovative, well resourced, and carefully monitored industrial policy is required.

New industrial paradigm

This industrial policy and strategic plan document has crafted a new paradigm for the manufacturing sector fixing the basis weaknesses prevailing in the Mauritian manufacturing base and leveraging on opportunities in developing the domestic market, tapping the regional and global market supported by a strong spell of product and process upgrading reinforced with a solid wave of Industry 4.0.

Consolidation, Diversification and Modernisation of the manufacturing sector

The multi-pronged strategy proposed in the IPSP document not only elucidates how consolidation, diversification and modernisation of the manufacturing sector could be achieved (upgrading of value chains) but it also specified the various enablers (industry foundations and other elements of the framework) as well as incentives that are vital to bring about such a transformation of the sector.

New growth poles

One of the new thrusts identified by the IPSP document is the opportunity to tap into the domestic market (para 4.3) represents for the manufacturing sector. Though this was a long time strategy adopted in the 1970's, its potential has been again unleashed after the study especially, after the Covid -19 imperatives for health protection and food security.

The opportunities that exist for manufacturers with regards to food processing and FMCG (Fast Moving Consumer Good) has been highlighted for the first time in the report. These good (e.g. detergents, soaps, soft drinks and confections) characterised by high consumer demand display low prices and are sold in large quantities. In addition, the study confirms the potential of exporting most of the FMCG's to the regional markets (para 4.3)

The IPSP has confirmed the importance of Textile and Clothing, Food and Fish Processing, Medical Devices and Jewellery subsectors as being important for the manufacturing sector. With regards to new growth poles, the report has cautioned that our competitive disadvantage (para 2.6.6) within other manufacturing sectors have to be corrected as there is no critical mass. The industry foundations and the other elements of the Industrial Policy Framework have to be applied to address such disadvantage and lay a proper foundation for new growth poles in the manufacturing sector.

CHAPTER 6

Table 36: Summary of Industrial Policy recommendations

Focus area		Recommendation	Type	Budget impact
Industry Foundations	1.	Establish a manufacturing sector skills development roadmap	Coordination	Funding for roadmap
	2.	Develop an expatriate permit expediting process allowing firms to respond to rapid market demand shifts	Coordination	Resourcing of expediting process
	3.	Develop a labour market flexibility framework that enhances the ability of manufacturers to adjust their capacity to market shifts	Coordination	None. Stakeholder engagement process
	4.	Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement	Coordination; infrastructure	Funding of accreditation capacity
	5.	Develop a digital roadmap for priority manufacturing sectors and ensure digital infrastructure is in place for evolving business models	Coordination	Funding for roadmap; and infrastructure gaps
	6.	Review the standard of industrial estates; and advance standards to those of leading industrial estates globally	Coordination; infrastructure	Resources for upgrading industrial estates
	7.	Review port operations and align costs and performance standards with leading merchandise ports internationally	Coordination	None. Engagement process with port
Upgrading of value chains	8.	Establish a Manufacturing Upgrading Fund (MUF)	Incentive	Rs1.9 billion over 5 years
	9.	Establish a Modernisation Investment Support Fund (MISF)	Incentive	Rs 4.4 billion to 2025; Rs 9.6 billion to 2030
	10.	Establish a Technology Innovation Incentive (TII)	Incentive	Lost income tax
Increased domestic market supply	11.	Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production	Coordination	Resourcing of certification capacity
	12.	Mauritian Competition Authority to monitor supermarket chain purchases; and respond to monopsonic trade practices	Coordination	None. Stakeholder engagement process
	13.	Government to engage with supermarkets on supporting local production, and supporting the private sector's Made in Moris label	Coordination	Stakeholder engagement; Made in Moris label support
	14.	Government to investigate the designation of local manufacturing for selected government procurement contracts	Coordination	None. Government coordination only
	15.	Review Mauritius' M&E of PTAs, and establish remediation processes that protect local manufacturers during investigations	Coordination	Resourcing of PTA M&E and remediation process
	16.	Explore potential domestic manufacturing servicification models, and develop market regulations that advantage these models	Coordination	Potentially substantial – but exploration dependent
Regional and global export growth	17.	Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets	Coordination, infrastructure	Resourcing of selected warehousing
	18.	Government to explore the provision of discounted export credit guarantees to support risky market search activities in SSA markets	Coordination	Resourcing of credit guarantee discounts
	19.	Target the development of regional value chains for selected manufacturing sub-sectors, including clothing and textiles, food processing, medical instruments, and jewellery.	Coordination	Resourcing of regional engagements
	20.	Negotiate continued market access advantages into the EU, US, and extend to Australasia	Coordination	None
	21.	Explore the establishment of cost-effective warehousing in key developed economy markets to aid SME supply into these markets	Coordination, infrastructure	Resourcing of selected warehousing
Advanced technology absorption	22.	Establish a formal institutional process to explore Mauritian and regional cyber-physical platform development opportunities; and to then link these opportunities to established upgrading incentives	Coordination	None. Link to incentives

REFERENCES

Aggarwal, A. (2017). Towards an integrated framework for Special Economic Zones (SEZs): A dynamic institutional approach. Copenhagen Discussion Papers No. 64. Asia Research Centre. Copenhagen Business School (CBS). Copenhagen. Denmark.

Balassa, B. (1965). Trade liberalisation and "revealed" comparative advantage. The Manchester School, 33(2), pp.99-123.

Bender, S. and Li, K.W. (2002). The changing trade and revealed comparative advantages of Asian and Latin American manufacture exports. Yale Economic Growth Centre Discussion Paper, (843).

Government of Mauritius, Foreign Affairs (2017). Mauritius Vision 2030: Innovative and Globally Competitive. Available from: https://www.foreignaffairs.com/sites/default/files/mauritius_jan-feb_2017_reprint_compr.pdf

Government of Mauritius, Ministry of Business Enterprise and Cooperatives (2017). 10 - Year Master Plan for The SME Sector in Mauritius: Accelerating SME Innovation & Growth. Ministry of Business Enterprise and Cooperatives. Mauritius. Available from: http://enterbusiness.govmu.org/English/Documents/SME%20Master%20Plan_Abridged%20Version_FINAL.pdf

Hagel, J., Seely Brown, J., Giffi, C. and Chen, M. (2015). The future of manufacturing: Making things in a changing world. Deloitte University Press.

Oanda, (2019). Historical Exchange Rates. Available: https://www1.oanda.com/fx-for-business/historical-rates. [2019, November].

Rodrik, D. (2004). Industrial policy for the Twenty First Century, UNIDO Working Paper, September. (Accessed from https://openknowledge.worldbank.org/handle/10986/3798)

Statistics Mauritius, (2019). Manufacturing. Available: http://statsmauritius.govmu.org/English/StatsbySubj/Pages/Manufacturing.aspx. [2019, October].

World Bank, (2019). Ease of Doing Business. Available: https://databank.worldbank.org/reports.aspx?source=3001&series=IC.ELC.PRI.KH.DB1619#.[2019, October].

UN Comtrade, (2019). UN Comtrade Database. Available: https://comtrade.un.org/data/. [2019, 15 October].

United National Industrial Development Organisation (2013), Sustaining Employment Growth: The Role of Manufacturing and Structural Change, Industrial Development Report 2013, UNIDO, Vienna.

APPENDIX A

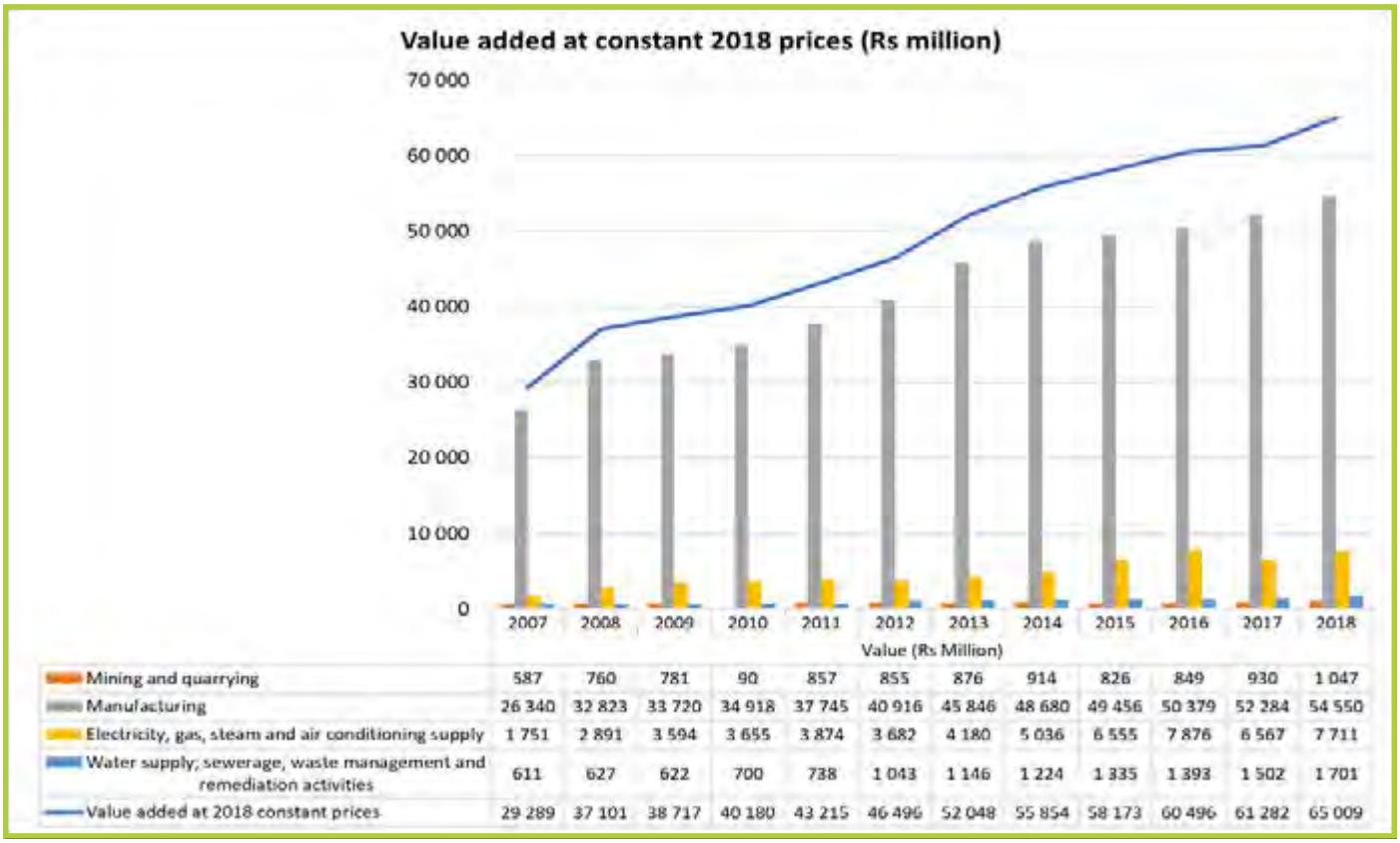
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

An overview of Mauritius' industrial and more specific manufacturing sector trends is presented in the figures and tables below. As revealed, recent performance has been relatively non-dynamic. Figure 9 and Figure 10 highlight Gross Value Added over the period 2007 to 2018, and while growth is evident in respect of Rs values (2018 constant prices), the trend in respect of US$ is less impressive. In fact, when measured in US$ Mauritian industrial GVA has stagnated over the period 2013 to 2018, at just under US$2 billion. Manufacturing, which dominates Mauritian industrial activity has performed more poorly, with its GVA declining from US$1.75 billion in 2013 to US$1.65 billion in 2019.

More positively, the industrial sub-sector that has performed the most dynamically over the last decade is electricity and gas supply. It has increased its GVA from only US$85 million in 2007 to US$233 million in 2018. While Mauritius has comparatively high electricity costs, as evident in Figure 11, the gap between Mauritian electricity prices and those of SADC and COMESA economies, as well as Africa's most industrialised economy, South Africa, has closed. It is also striking that Mauritius has the most reliable electricity supply in Africa (with Namibia), as highlighted in Figure 12.

Figure 9: Mauritian industrial GVA, 2007-2018 (in constant Rs 2018 values)

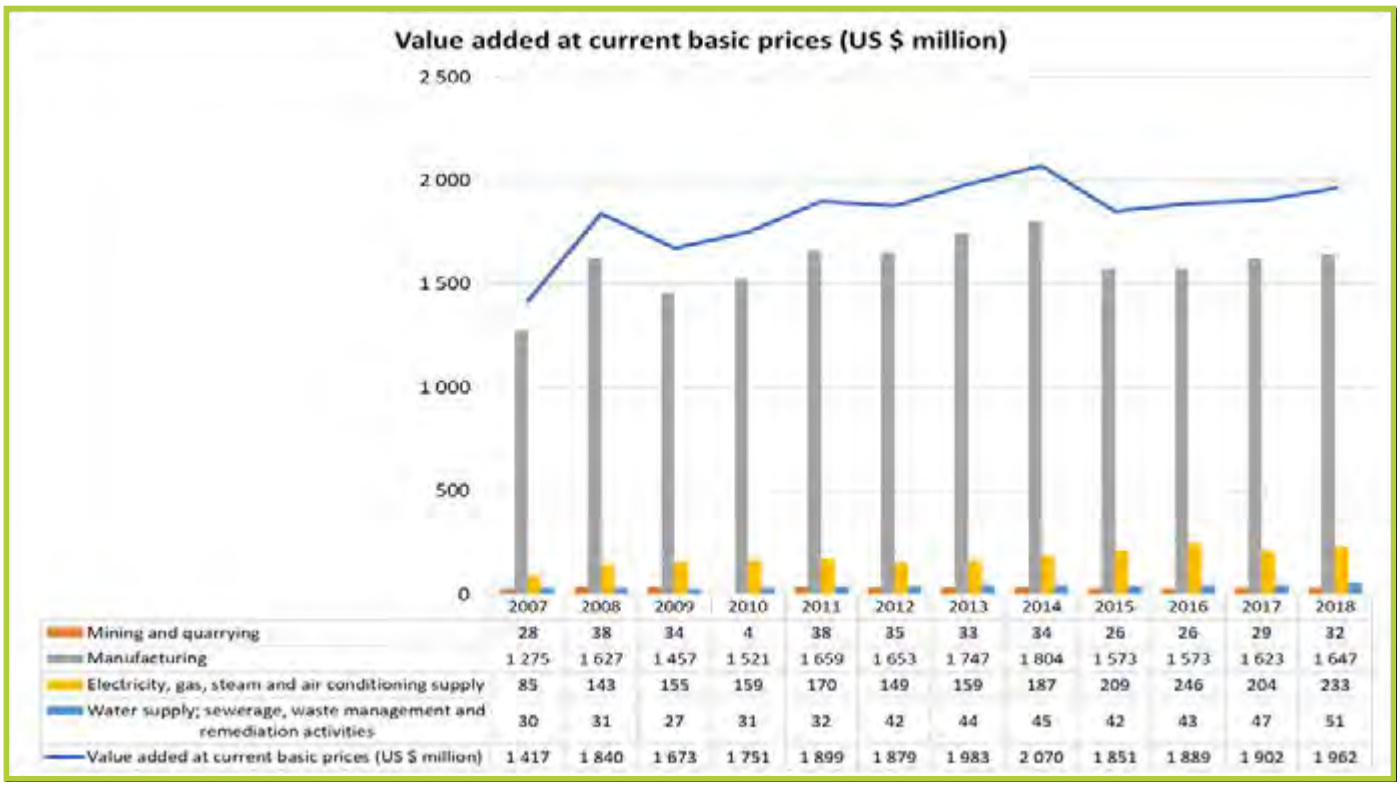


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	587	760	781	90	857	855	876	914	826	849	930	1 047
Manufacturing	26 340	32 823	33 720	34 918	37 745	40 916	45 846	48 680	49 456	50 379	52 284	54 550
Electricity, gas, steam and air conditioning supply	1 751	2 891	3 594	3 655	3 874	3 682	4 180	5 036	6 555	7 876	6 567	7 711
Water supply; sewerage, waste management and remediation activities	611	627	622	700	738	1 043	1 146	1 224	1 335	1 393	1 502	1 701
Value added at 2018 constant prices	29 289	37 101	38 717	40 180	43 215	46 496	52 048	55 854	58 173	60 496	61 282	65 009

Source: Statistics Mauritius, 2019

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

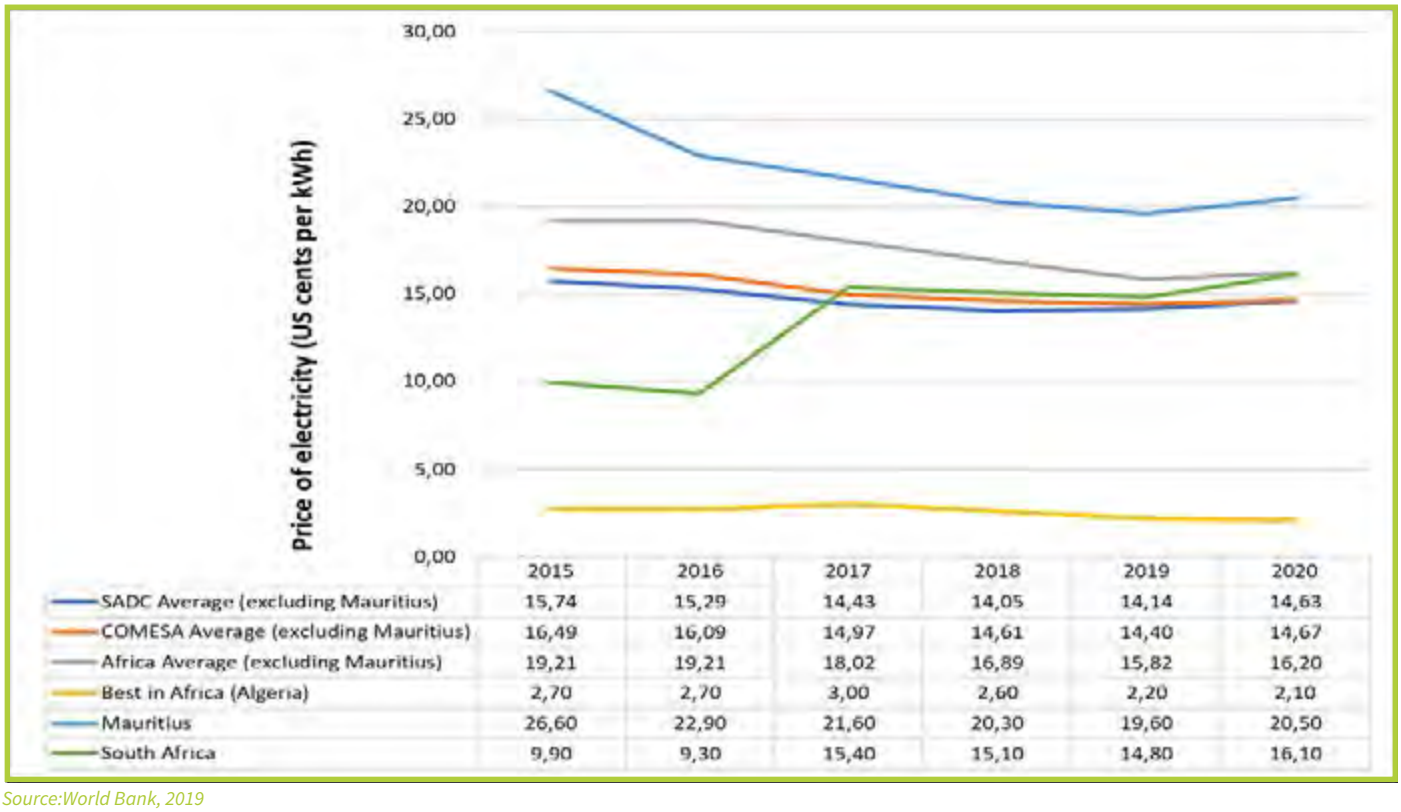
Figure 10: Mauritian industrial GVA, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	28	38	34	4	38	35	33	34	26	26	29	32
Manufacturing	1 275	1 627	1 457	1 521	1 659	1 653	1 747	1 804	1 573	1 573	1 623	1 647
Electricity, gas, steam and air conditioning supply	85	143	155	159	170	149	159	187	209	246	204	233
Water supply; sewerage, waste management and remediation activities	30	31	27	31	32	42	44	45	42	43	47	51
Value added at current basic prices (US $ million)	1 417	1 840	1 673	1 751	1 899	1 879	1 983	2 070	1 851	1 889	1 902	1 962

Source: Statistics Mauritius, 2019; Oanda, 2019

Figure 11: Mauritian electricity prices, 2015-2020, relative to African comparators

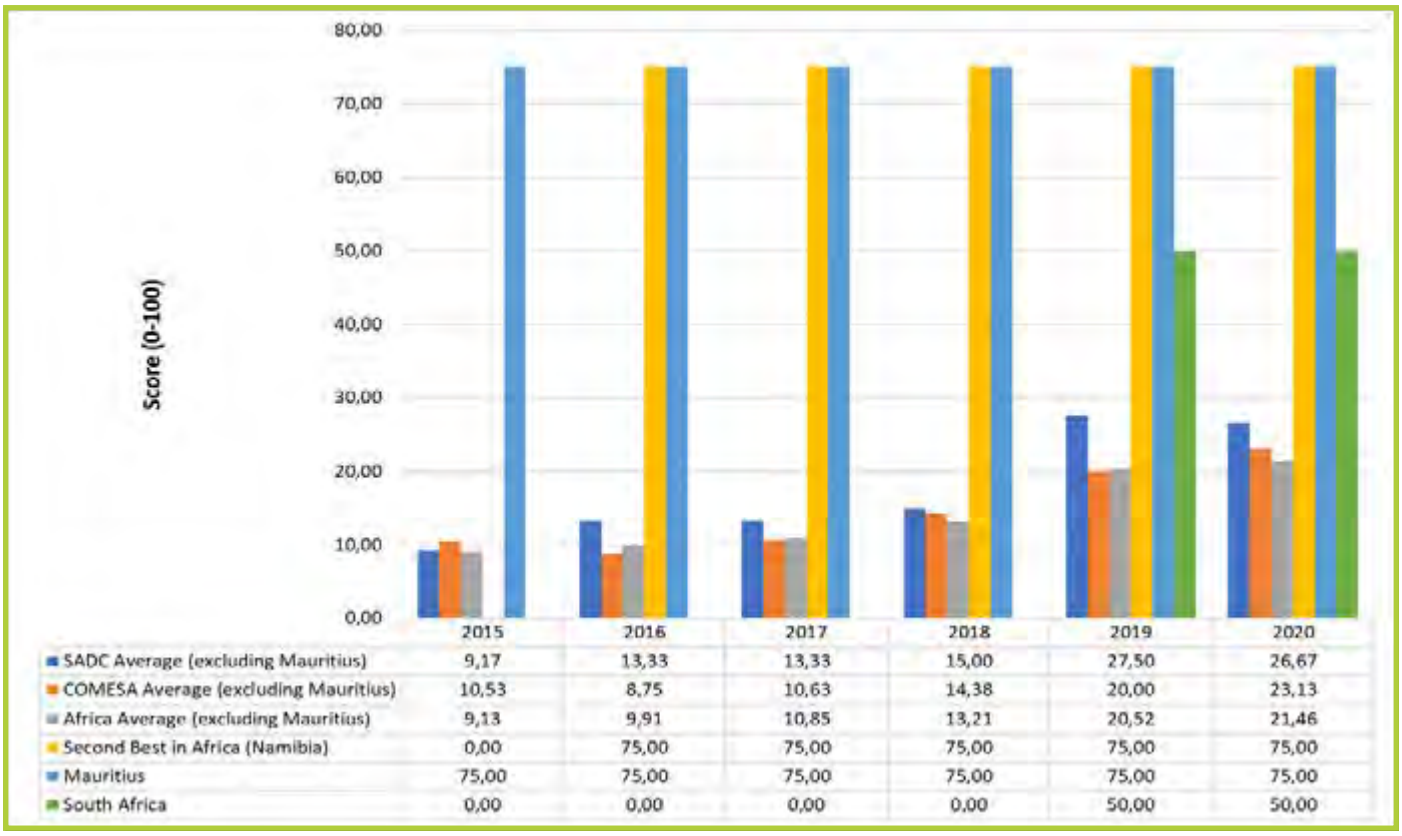


	2015	2016	2017	2018	2019	2020
SADC Average (excluding Mauritius)	15,74	15,29	14,43	14,05	14,14	14,63
COMESA Average (excluding Mauritius)	16,49	16,09	14,97	14,61	14,40	14,67
Africa Average (excluding Mauritius)	19,21	19,21	18,02	16,89	15,82	16,20
Best in Africa (Algeria)	2,70	2,70	3,00	2,60	2,20	2,10
Mauritius	26,60	22,90	21,60	20,30	19,60	20,50
South Africa	9,90	9,30	15,40	15,10	14,80	16,10

Source:World Bank, 2019

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Figure 12: Mauritian electricity reliability, 2015-2020, relative to African comparators



	2015	2016	2017	2018	2019	2020
SADC Average (excluding Mauritius)	9,17	13,33	13,33	15,00	27,50	26,67
COMESA Average (excluding Mauritius)	10,53	8,75	10,63	14,38	20,00	23,13
Africa Average (excluding Mauritius)	9,13	9,91	10,85	13,21	20,52	21,46
Second Best in Africa (Namibia)	0,00	75,00	75,00	75,00	75,00	75,00
Mauritius	75,00	75,00	75,00	75,00	75,00	75,00
South Africa	0,00	0,00	0,00	0,00	50,00	50,00

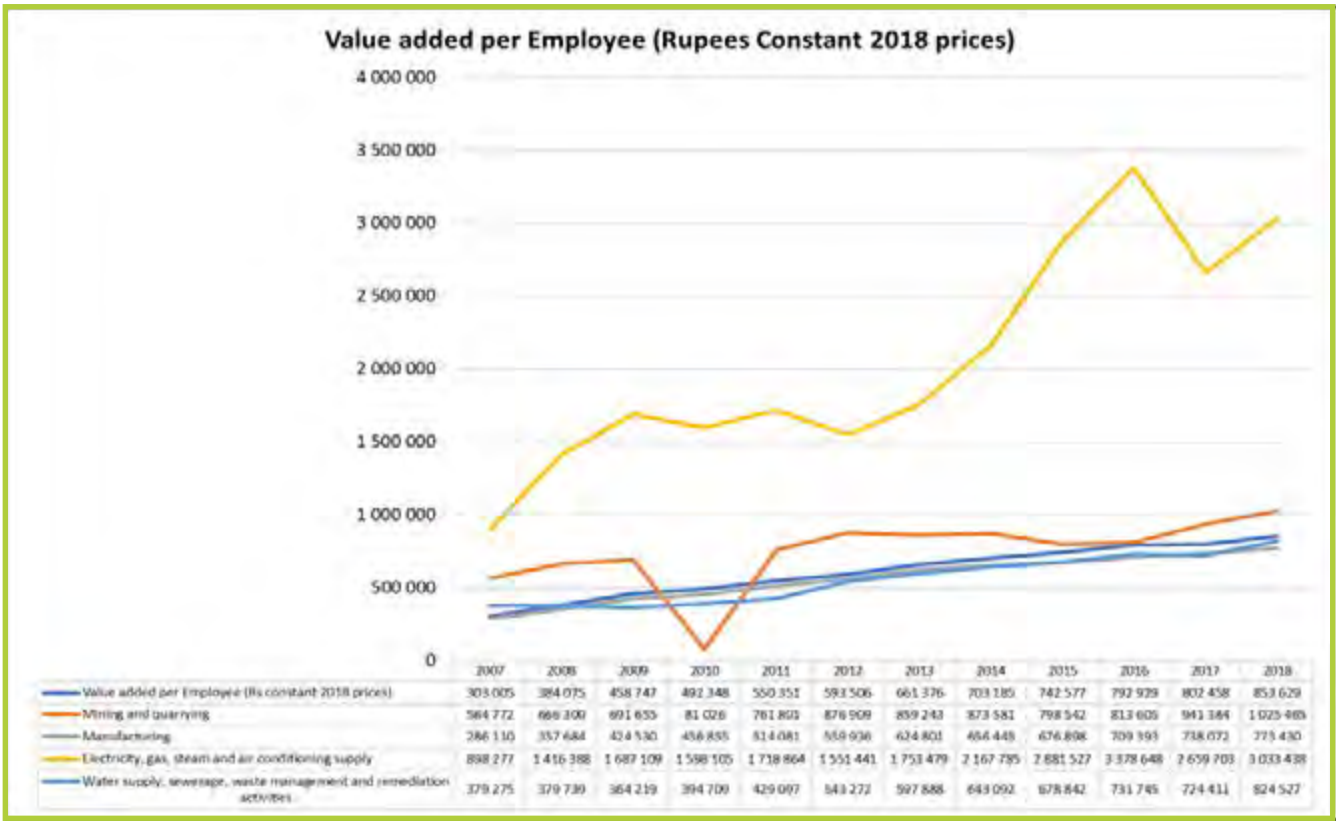
Source:World Bank, 2019

Labour productivity

Macro data suggests that Mauritian industrial sector GVA per employee has increased significantly over the last decade, but this has been driven almost exclusively by major increases in electricity and gas supply. Manufacturing sector GVA per employee increased less impressively over the period, when measured in Rs (2018 constant values), and not at all when measured in US$. Manufacturing GVA per employee increased from Rs 624,801 to Rs 773,430 from 2013 to 2018 (see Figure 13), but in US$ terms, GVA per employee performance remained flat, shifting from US$23,806 in 2013 to US$23,346 in 2018 (see Figure 14).

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

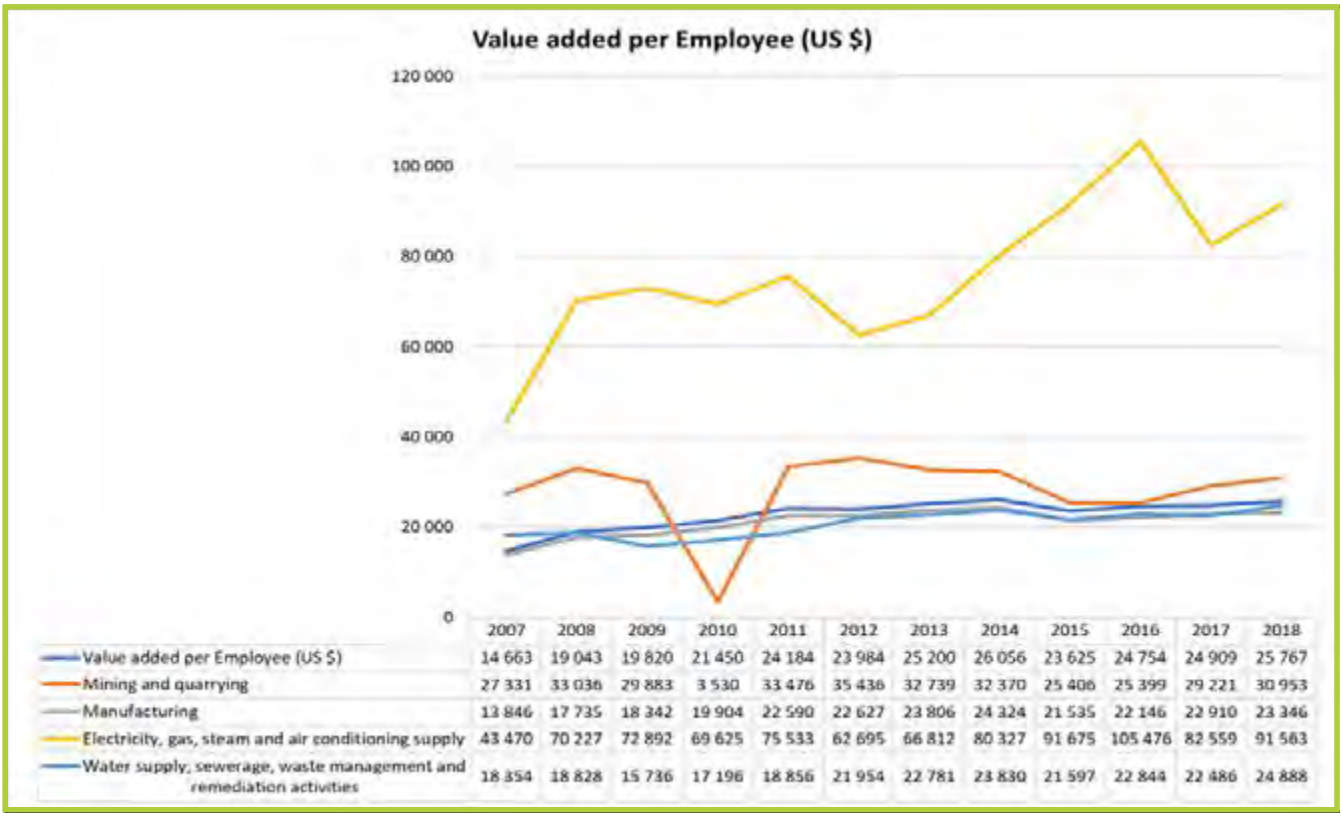
Figure 13: Mauritian industrial GVA per employee, 2007-2018 (in constant Rs 2018 values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Value added per Employee (Rs constant 2018 prices)	303 005	384 075	458 747	492 348	550 351	593 506	661 376	703 185	742 577	792 929	802 458	853 629
Mining and quarrying	564 772	666 300	691 655	81 026	781 803	876 909	859 243	873 581	798 542	813 605	941 184	1 025 485
Manufacturing	286 110	357 684	424 530	456 855	514 081	559 036	624 801	664 445	676 808	709 393	738 072	775 430
Electricity, gas, steam and air conditioning supply	898 277	1 416 388	1 687 109	1 598 505	1 718 864	1 551 441	1 753 479	2 167 785	2 881 527	3 378 648	2 659 703	3 033 438
Water supply; sewerage, waste management and remediation activities	379 275	379 739	364 219	394 709	429 097	543 272	597 888	643 092	678 842	731 745	724 411	824 527

Source: Statistics Mauritius, 2019

Figure 14: Mauritian industrial GVA per employee, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Value added per Employee (US $)	14 663	19 043	19 820	21 450	24 184	23 984	25 200	26 056	23 625	24 754	24 909	25 767
Mining and quarrying	27 331	33 036	29 883	3 530	33 476	35 436	32 739	32 370	25 406	25 399	29 221	30 953
Manufacturing	13 846	17 735	18 342	19 904	22 590	22 627	23 806	24 324	21 535	22 146	22 910	23 346
Electricity, gas, steam and air conditioning supply	43 470	70 227	72 892	69 625	75 533	62 695	66 812	80 327	91 675	105 476	82 559	91 563
Water supply; sewerage, waste management and remediation activities	18 354	18 828	15 736	17 196	18 856	21 954	22 781	23 830	21 597	22 844	22 486	24 888

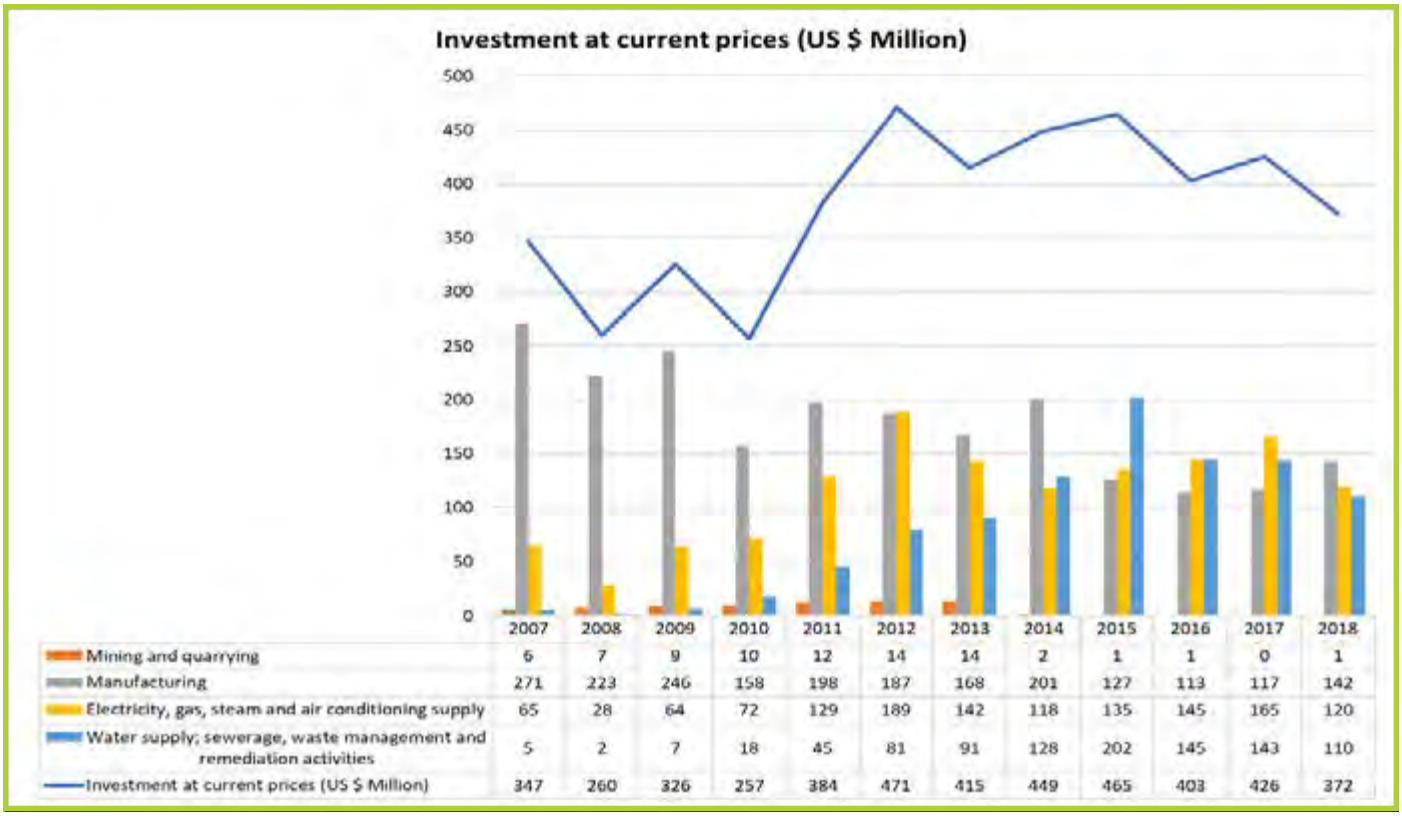
Source: Statistics Mauritius, 2019; Oanda, 2019

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Investment and employment

The largely non-dynamic labour productivity profile of Mauritian manufacturing is mirrored in recent investment levels. As highlighted in Figure 15, in US$ terms, industrial investment increased from 2007 to 2012, and then declined to 2018. However, this masks major sub-sector differences. While there has been major investment in electricity generation, manufacturing investmenthas declined consistently since 2007, with 2016 and 2017 investment levels reaching lows of US$ 113 million and US$ 117 million respectively, or substantially less than half 2007 levels of US$ 271 million. Significant recovery is however evident for 2018, with investment increasing to US$142 million.

Figure 15: Mauritian industrial investment, 2007-2018 (US$ values)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Mining and quarrying	6	7	9	10	12	14	14	2	1	1	0	1
Manufacturing	271	223	246	158	198	187	168	201	127	113	117	142
Electricity, gas, steam and air conditioning supply	65	28	64	72	129	189	142	118	135	145	165	120
Water supply; sewerage, waste management and remediation activities	5	2	7	18	45	81	91	128	202	145	143	110
Investment at current prices (US $ Million)	347	260	326	257	384	471	415	449	465	403	426	372

Source: Statistics Mauritius, 2019; Oanda, 2019

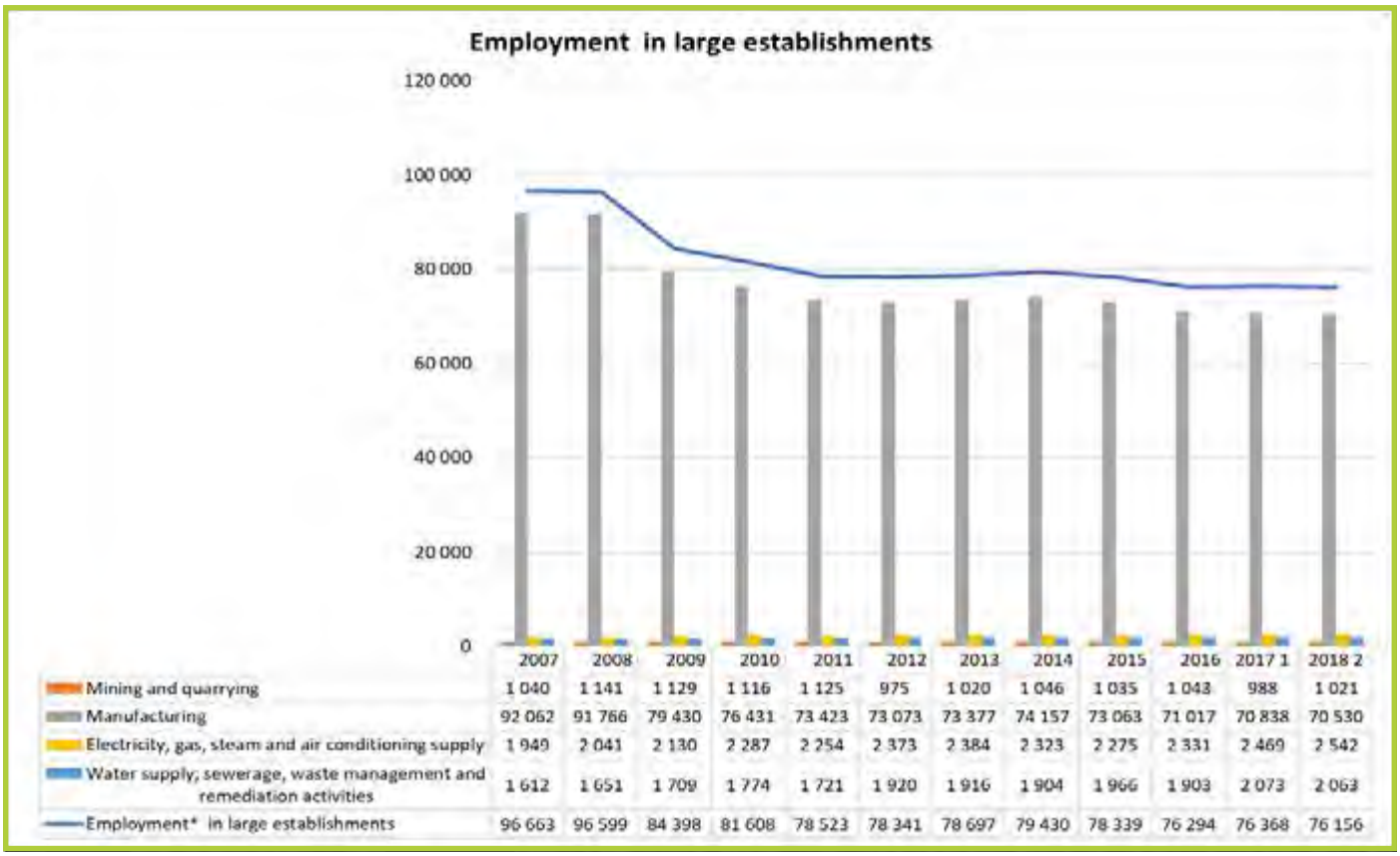
Large manufacturing establishment employment in Mauritius has reduced in tandem with declining investment levels. Manufacturing employment dropped particularly significantly from 2007 to 2009 (from 92,062 to 79,430 employees) as a result of the Global Financial Crisis, and then moderately thereafter. This is highlighted in Figure 16, which reveals that large establishment manufacturing employment dropped to 70,530 people in 2018, its lowest level since 2007. A breakdown of this employment is presented in Table 37, and as revealed most manufacturing jobs are in the clothing (33,635) and textiles (5,483) value chain (with total employment of 39,118), and food products (11,810 jobs). While clothing and textiles have seen major declines in employment over the last decade (although not over the last five years), food product employment has increased slightly.

Manufacturing sub-sectors that have experienced a positive CAGR over the last five years are: food products (0.52%); textiles (1.06%); leather and related products (3.44%); printing (0.86%); fabricated metal products (4.91%); and electrical equipment (0.22%).

Courtesy: RTKnits

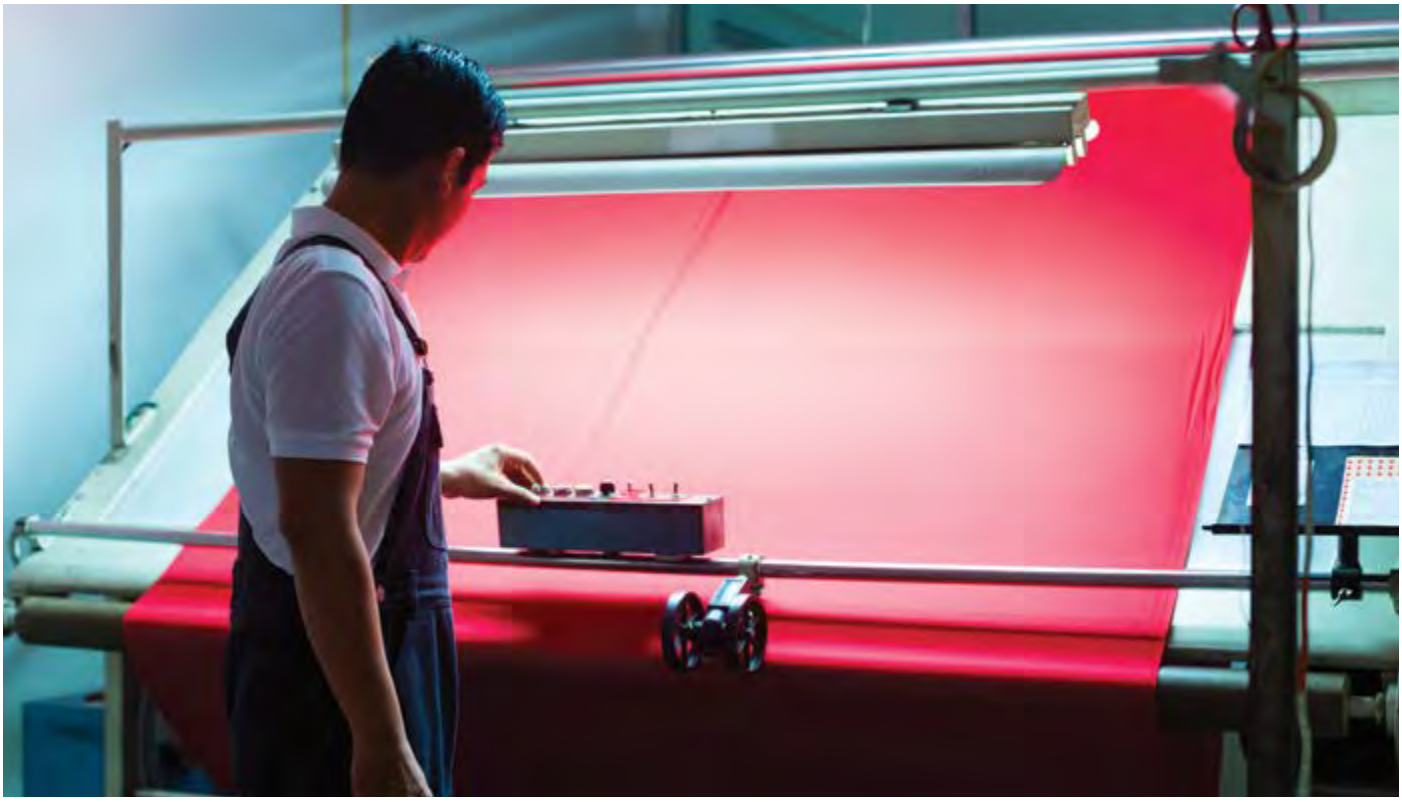
APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Figure 16: Mauritian industrial employment, 2007-2018 (large establishments only)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 1	2018 2
Mining and quarrying	1 040	1 141	1 129	1 116	1 125	975	1 020	1 046	1 035	1 043	988	1 021
Manufacturing	92 062	91 766	79 430	76 431	73 423	73 073	73 377	74 157	73 063	71 017	70 838	70 530
Electricity, gas, steam and air conditioning supply	1 949	2 041	2 130	2 287	2 254	2 373	2 384	2 323	2 275	2 331	2 469	2 542
Water supply; sewerage, waste management and remediation activities	1 612	1 651	1 709	1 774	1 721	1 920	1 916	1 904	1 966	1 903	2 073	2 063
Employment* in large establishments	96 663	96 599	84 398	81 608	78 523	78 341	78 697	79 430	78 339	76 294	76 368	76 156

Source: Statistics Mauritius, 2019



APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Table 37: Breakdown of Mauritian industrial employment for large establishments only, 2007-2018

NSIC	Industry Group	2007	2013	2018	CAGR: 11 years	CAGR: 5 years
05-09	Mining and quarrying	1 040	1 020	1 021	-0,17%	-0,60%
10-33	Manufacturing	92 062	73 377	70 530	-2,39%	-1,25%
10	Food products	11 109	11 219	11 810	0,56%	0,52%
11	Beverages	2 703	2 622	2 432	-0,96%	-2,45%
13	Textiles	7 122	5 353	5 483	-2,35%	1,06%
14	Wearing apparel	51 149	36 801	33 635	-3,74%	-2,56%
15	Leather and related products	962	760	823	-1,41%	3,44%
16	Wood; wood/cork products, excl. furniture; straw/plaiting	599	623	426	-3,05%	-6,73%
17	Paper and paper products	624	585	626	0,03%	-1,87%
18	Printing and reproduction of recorded media	1 853	1 594	1 633	-1,14%	0,86%
19-21	Coke/refined petroleum products;chemicals/ chemical products; pharmaceutical products/ preparations	2 319	2 439	2 368	0,19%	-0,11%
22	Rubber and plastic products	1 717	1 439	1 391	-1,90%	-0,02%
23	Other non-metallic mineral products	1 285	1 113	828	-3,92%	-9,66%
24	Basic metals	443	472	437	-0,12%	-0,73%
25	Fabricated metal products, except machinery and equipment	2 476	1 861	2 222	-0,98%	4,91%
26	Computer, electronic, optical products	1 894	1 329	1 136	-4,54%	-2,30%
27	Electrical equipment	541	293	343	-4,06%	0,22%
28	Machinery and equipment n.e.c.	536	252	161	-10,36%	-11,38%
29-30	Motor vehicles, trailers/semi-trailers/other transport equipment	460	437	231	-6,07%	-5,61%
31	Furniture	960	833	819	-1,43%	-1,86%
32	Other	3 188	2 715	2 959	-0,68%	1,40%
321	Of which: Jewellery, related articles	2 150	1 418	1 401	-3,82%	-0,65%
33	Repair and installation of machinery and equipment	122	637	767	18,19%	2,61%
35	Electricity, gas, steam and air conditioning supply	1 949	2 384	2 542	2,44%	2,28%
36-39	Water supply; sewerage, waste managementactivities	1 612	1 916	2 063	2,27%	2,03%
05-39	Total industrial sector	96 663	78 697	76 156	-2,14%	-1,05%

Source: Statistics Mauritius, 2019

Mauritian merchandise exports

Mauritius' top 20 most important merchandise exports for 2018 are presented in ranking order in Table 38, along with their exporting levels in 2004 and 2014, and their CAGR for the last 15 years. As highlighted, there have been major changes in the composition of Mauritian merchandise exports, with HS 1604 (prepared/preserved fish; caviar/fish egg substitutes) becoming Mauritius' most important merchandise exports, with a 15-year CAGR of 9.43%; relative to major declines in HS 6109(T-shirts, singlets, other vests, knitted or crocheted) and HS 1701 (cane/beet sugar and… pure sucrose, in solid form).

These second and third ranked export categories experienced negative 15-year CAGRs of 7.5% and 6.16% respectively. Merchandise exports are dominated by clothing products of varying kinds,although HS 3923 (articles for the conveyance or packing of goods, of plastics, etc.) also features in the top 10, with a 15-year CAGR of 18.3%, taking 2018 exports to US$37.9 million.

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Four other export categories stand out for strong recent performance:

1. HS 9018 (instruments/appliances used in medical, surgical, dental, and veterinary sciences), with exports of US$30.1 million in 2018 and a 15-year CAGR of 15.8%;
2. HS 3004 (medicaments, excluding under HS 30.02/.05/.06, of mixed or unmixed products for therapeutic and/or prophylactic use, etc.), with exports of US$28.4 million in 2018 and a 15-year CAGR of 14.5%;
3. HS 2207 (undenatured ethyl alcohol of 80% volume or higher; ethyl alcohol/other spirits, denatured, of any strength), with exports of US$18.2 million in 2018 and a 15-year CAGR of 17.3%; and
4. HS 1902 (pasta, whether or not cooked or stuffed with meat or other substances, or otherwise prepared), with exports of US$17.6 million in 2018 and a 15-year CAGR of 16.1%.

Table 38: Mauritius' 20 most important merchandise exports, 2004, 2014, 2018 (US$)

Rank	HS code	Product Description	2004	2014	2018	CAGR (15 years)
1	1604	Prepared/preserved fish; caviar/fish egg substitutes	81 438 280	310 097 408	287 539 264	9,43%
2	6109	T-shirts, singlets, other vests, knitted or crocheted	437 670 624	230 653 520	146 930 320	-7,50%
3	1701	Cane/beet sugar and… pure sucrose, in solid form	354 761 216	253 969 232	145 735 120	-6,16%
4	6205	Men's or boys' shirts	132 602 168	166 821 344	138 139 968	0,29%
5	6203	Men's or boys' suits, jackets, trousers, etc..	71 532 896	115 836 904	115 630 440	3,49%
6	6204	Women's or girls' suits, jackets, skirts, etc.	68 137 696	47 656 464	55 003 796	-1,52%
7	6110	Jerseys, pullovers, etc., knitted or crocheted.	106 253 312	61 392 460	45 245 704	-5,92%
8	3923	Articles for conveyance or packing of goods, of plastics, etc.	3 587 985	1 338 594	37 881 660	18,33%
9	6104	Women's or girls' suits, jackets, skirts, etc., knitted or crocheted	16 632 101	58 976 620	32 980 680	5,01%
10	6105	Men's or boys' shirts, knitted or crocheted	32 535 760	30 577 888	32 928 108	0,09%
11	9018	Instruments/appliances used in medical, surgical, dental, vet sciences	3 880 916	17 127 128	30 085 624	15,75%
12	3004	Medicaments (excl. HS 30.02/.05/.06) of mixed/ unmixed products for therapeutic/prophylactic use…	4 270 503	1 143 847	28 372 024	14,48%
13	5205	Cotton yarn (except sewing thread), containing 85% or more by weight of cotton, not for retail sale	5 022 762	15 382 302	22 918 568	11,45%
14	2711	Petroleum gases and other gas hydrocarbons	1 454 356	0	21 187 398	21,09%
15	2207	Undenatured ethyl alcohol of 80% vol. or higher; ethyl alcohol/other spirits, denatured, any strength	1 940 334	4 573 372	18 207 084	17,34%
16	1902	Pasta, whether or not cooked or stuffed (with meat or other substances) or otherwise prepared	2 181 015	7 096 474	17 639 870	16,10%
17	6006	Other knitted or crocheted fabrics.	769 393	10 814 955	17 263 516	24,88%
18	6001	Pile fabrics, incl. long pile and terry fabrics, knitted or crocheted	8 332 389	20 981 388	16 796 642	5,13%
19	5106	Yarn of carded wool, not for retail sale	6 886 643	16 582 354	16 470 761	6,43%
20	5208	Woven fabrics, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	8 039 205	5 113 514	14 712 911	4,41%

Source: UN Comtrade, 2019

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Exports from Mauritius that have experienced a CAGR of more than 7% over the five year period to 2018 are presented in Table 39. As highlighted, there are six products that have experienced export CAGRs of more than 100% over the last five years.

Four of the seven have grown significantly off a small base, e.g. HS 6402 (other footwear with outer soles and uppers of rubber or plastics); but HS 3923 (articles for the conveyance or packing of goods, of plastics; etc.) and HS 3004 (medicaments, excluding goods of heading 30.02, 30.05 or 30.06, consisting of mixed or unmixed products for therapeutic or prophylactic uses, etc.) are now significant exports, with 2018 exporting levels of US$37.9 million and US28.4 million respectively.

Table 39: Mauritian exports that grew at a CAGR of more than 7% over the five-period to 2018 (US$)

HS Code	Product Description	2018	CAGR (5 year)
6402	Other footwear with outer soles and uppers of rubber or plastics	4 182 925	300,46%
3304	Beauty or make-up preparations and preparations for the care of the skin, etc.	8 663 719	262,04%
6403	Footwear with outer soles of rubber, plastics, leather/composition leather; uppers of leather	3 345 204	218,42%
3303	Perfumes and toilet waters	2 834 942	167,93%
3923	Articles for the conveyance or packing of goods, of plastics; etc.	37 881 660	130,65%
3004	Medicaments (excluding goods of heading 30.02, 30.05 or 30.06) consisting of mixed or unmixed products for therapeutic or prophylactic uses, etc.	28 372 024	123,17%
3402	Organic surface-active agents (except soap); surface-active/washing/cleaning preparations, etc.	4 430 993	88,04%
3401	Soap; organic surface-active products and preparations for use as soap, in the form of bars, cakes, moulded pieces or shapes, whether or not containing soap; etc.	4 462 361	75,68%
5402	Synthetic filament yarn (excl. sewing thread), not for retail sale, including synthetic monofilament of less than 67 decitex	2 336 278	74,84%
2207	Undenatured ethyl alcohol of 80% vol. or higher; ethyl alcohol/other spirits, denatured, of any strength	18 207 084	41,25%
6114	Other garments, knitted or crocheted	10 122 447	41,11%
6107	Men's or boys' underpants, briefs, nightshirts, pyjamas, bathrobes, dressing gowns, etc., knitted or crocheted	1 732 771	36,18%
4911	Other printed matter, including printed pictures and photographs	12 125 933	34,10%
5208	Woven fabrics, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	14 712 911	30,24%
2208	Undenatured ethyl alcohol of less than 80% vol.; spirits, liqueurs, other spirit beverages.	5 169 384	29,14%
4420	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; etc.	1 632 716	28,24%
1902	Pasta, whether or not cooked or stuffed; whether or not prepared.	17 639 870	25,56%
4016	Other articles of vulcanised rubber other than hard rubber	2 104 875	24,85%
7610	Aluminium structures (excl. prefabricated buildings of HS94.06) and parts of structures… aluminium plates, rods, profiles, tubes, etc. for use in structures	5 882 465	23,69%
6302	Bed linen, table linen, toilet linen and kitchen linen	1 538 423	19,82%
9018	Instruments and appliances used in medical, surgical, dental or veterinary sciences, etc.	30 085 624	15,12%
6006	Other knitted or crocheted fabrics	17 263 516	12,40%
4821	Paper or paperboard labels of all kinds, whether or not printed	3 656 159	10,77%
5205	Yarn (excl. sewing thread), containing 85% or more by weight of cotton, not for retail sale	22 918 568	10,48%
3405	Polishes and creams, for footwear, furniture, floors, coachwork, glass or metal, scouring pastes and powders and similar preparations, excluding waxes of HS34.04	1 478 020	7,83%
3917	Tubes, pipes and hoses, and fittings therefor, of plastics	2 690 081	7,24%

Source: UN Comtrade, 2019

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Mauritius' most important export destinations are presented in Table 40. As highlighted, exports to the country's two most important destinations, France and the United Kingdom, have declined very significantly over the last few years. These losses have been compensated by growing exports to South Africa, Madagascar, and Kenya, suggesting a major shift in Mauritius' export orientation.

Table 40: Mauritius' ten most important export destinations (US$)

Rank	Country	2004	2014	2016	2018	CAGR (last 15years)	CAGR (last 5 years)
1	France	332 679 488	242 449 024	221 148 576	221 936 640	-2,85%	-2,19%
2	United Kingdom	627 539 328	350 142 592	348 156 288	211 943 392	-7,46%	-11,79%
3	South Africa	17 103 692	164 886 080	146 294 400	204 144 560	19,38%	5,48%
4	United States	259 742 784	211 397 344	196 358 304	163 265 696	-3,26%	-6,25%
5	Madagascar	72 662 336	71 528 144	81 447 080	102 633 672	2,50%	9,45%
6	Spain	19 565 576	104 212 880	140 388 096	88 879 664	11,42%	-3,90%
7	Italy	62 248 672	161 701 696	277 055 744	86 272 312	2,36%	-14,53%
8	Netherlands	32 652 708	64 007 516	101 747 224	77 765 472	6,39%	4,99%
9	Kenya	2 516 690	2 757 379	45 616 208	47 358 452	23,32%	103,58%
10	Germany	39 080 888	16 110 270	31 093 812	36 590 632	-0,47%	22,76%

Source: Un Comtrade. 2019

Mauritian merchandise imports

Mauritius' top 20 most important merchandise imports for 2018 are presented in ranking order in Table 41, along with their importing levels in 2004 and 2014, and their CAGR for the last 15 years. Consistent with Mauritius' exporting profile, there have been major changes in the composition of Mauritian imports, revealing a major change in the consumption profile of economic activity in the country. This is further evident from the substantial CAGR of most high-ranking imports. The CAGR for the top six merchandise imports is in fact above 7% for each of the top six products, with Mauritius' two most significant imports (HS 2710 – petroleum and HS 8703 – passenger vehicles) increasing at 8.1% and 7.9% respectively.

Major imported products with the highest CAGRs are:

1. HS 2402 (cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes), with 2018 import levels of US$ 64.6 million, and a 15-year CAGR of 17.6%;
2. HS 1905 (bread, pastry, cakes, biscuits and other bakers' wares, etc.),with 2018 import levels of US$ 38.2 million, and a 15-year CAGR of 12.6%; and
3. HS 3304 (beauty/make-up preparations and preparations for the care of the skin (other than medicaments), with 2018 import levels of US$ 28.4 million, and a 15-year CAGR of 12.8%.

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Table 41: Mauritius' 20 most important merchandise imports, 2004, 2014, 2018 (US$)

Rank	HS code	Product Description	2004	2014	2018	CAGR (15 year)
1	2710	Petroleum oils and oils obtained from bituminous minerals, other than crude; etc.	318 941 344	890 019 904	943 619 200	8,06%
2	8703	Motor cars and other motor vehicles for the transport of persons (except HS87.02)	86 698 552	182 590 624	250 017 072	7,86%
3	3004	Medicaments (excl.HS30.02/.05/.06) of mixed or unmixed products for therapeutic/prophylactic uses	48 124 360	105 961 768	125 919 880	7,11%
4	2711	Petroleum gases and other gaseous hydrocarbons	23 300 186	105 313 064	103 537 104	11,24%
5	2701	Coal; briquettes, ovoids and similar solid fuels manufactured from coal	18 867 558	69 520 264	75 629 472	10,43%
6	2402	Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes	6 670 123	67 754 288	64 551 392	17,60%
7	8704	Motor vehicles for the transport of goods.	32 518 204	45 065 944	60 979 152	4,59%
8	5208	Woven fabrics, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	47 752 608	78 590 512	57 250 376	1,30%
9	5201	Cotton, not carded or combed	28 538 280	40 030 664	46 256 108	3,51%
10	5205	Yarn (except sewing thread), containing 85% or more by weight of cotton, not for retail sale	112 101 560	45 575 848	44 593 532	-6,37%
11	2106	Food preparations not elsewhere specified	14 747 227	30 141 434	39 293 800	7,25%
12	1905	Bread, pastry, cakes, biscuits and other bakers' wares, etc.	7 272 272	30 781 452	38 183 492	12,58%
13	9403	Other furniture and parts thereof	9 513 240	25 860 460	32 473 446	9,17%
14	7604	Aluminium bars, rods and profiles	9 834 826	24 701 172	28 801 760	7,98%
15	3304	Beauty/make-up preparations and preparations for the care of the skin (other than medicaments)	5 295 111	27 543 040	28 412 152	12,75%
16	8708	Parts and accessories of motor vehicles of HS87.01 to 87.05	7 647 352	24 211 080	26 176 936	9,19%
17	1806	Chocolate/other food preparations containing cocoa	6 975 192	18 487 984	23 631 908	9,11%
18	7213	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	4 763 895	15 867 574	22 540 446	11,74%
19	4011	New pneumatic tyres, of rubber	11 664 032	24 122 306	22 519 116	4,81%
20	2304	Oil-cake and other solid residues, ground or as pellets, from the extraction of soya bean oil	10 846 424	29 358 320	21 884 028	5,14%

Source: UN Comtrade, 2019

Imports into Mauritius that have experienced a CAGR of more than 7% over the five-year period to 2018 are presented in Table 42. As highlighted, there is an extensive list of products, indicating the increasing import propensity of the Mauritian economy. Five import products have even experienced import CAGRs of more than 40% over the period.

APPENDIX A
REVIEW OF MAURITIUS' INDUSTRIAL SECTOR PERFORMANCE

Table 42: Mauritian imports that grew at a CAGR of more than 7% over the five-period to 2018 (US$)

HS Code	Product Description	2018	CAGR (5 years)
7302	Railway or tramway track construction material of iron or steel, etc.	4 742 860	147,86%
5210	Woven fabrics, less than 85% by weight of cotton, mixed w/ synthetic fibres, weighing no more than 200g/m2	3 767 622	47,79%
9406	Prefabricated buildings	18 423 332	45,52%
1605	Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved.	4 393 861	43,57%
7207	Semi-finished products of iron or non-alloy steel.	5 636 431	40,62%
8705	Special purpose motor vehicles, e.g. breakdown lorries, crane lorries, fire fighting vehicles, etc.	5 901 733	31,46%
7303	Tubes, pipes and hollow profiles, of cast iron	2 993 924	31,08%
6103	Men's or boys' suits, ensembles, jackets, blazers, trousers, etc., knitted or crocheted	1 900 343	29,68%
5101	Wool, not carded or combed	13 245 421	29,00%
7304	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	2 161 162	25,11%
2915	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides, etc.	5 485 836	24,15%
6106	Women's or girls' blouses, shirts and shirt-blouses, knitted or crocheted	2 454 792	23,75%
5209	Woven fabrics, containing 85% or more by weight of cotton, weighing more than 200 g/m2	15 380 912	22,39%
2309	Preparations of a kind used in animal feeding.	15 852 501	20,38%
5211	Woven fabrics, less than 85% by weight of cotton, mixed w/ synthetic fibres, weighing more than 200 g/m2	2 160 822	18,85%
6109	T-shirts, singlets and other vests, knitted or crocheted	6 476 605	18,66%
2203	Beer made from malt	1 522 460	17,84%
7219	Flat-rolled products of stainless steel, of a width of 600mm or more	1 805 692	17,79%
7308	Structures (excl. prefabricated buildings of HS94.06) and parts of structures… of iron or steel, etc.	17 087 426	16,29%
6206	Women's or girls' blouses, shirts and shirt-blouses	7 403 981	16,03%
7612	Aluminium casks, drums, cans, boxes, similar containers, for any material, of a capacity not exceeding 300l...	6 768 616	14,59%
2815	Sodium hydroxide; potassium hydroxide; peroxides of sodium or potassium	3 565 079	14,41%
6305	Sacks and bags, of a kind used for the packing of goods	4 687 321	13,75%
8701	Tractors (other than tractors of HS87.09)	9 321 356	13,27%
4412	Plywood, veneered panels and similar laminated wood	16 755 683	13,22%
5206	Yarn (excl. sewing thread), containing less than 85% by weight of cotton, not for retail sale	2 173 520	12,36%
7306	Other tubes, pipes and hollow profiles of iron or steel	17 623 790	12,14%
3214	Glaziers' putty, grafting putty, resin cements, etc.	5 393 826	11,94%
7317	Nails, tacks, drawing pins, corrugated nails, staples, etc.	1 567 991	11,84%
6405	Other footwear	8 533 527	11,78%
6505	Hats/other headgear, knitted or crocheted, or made from lace, felt or other textile fabric, etc.	1 775 108	11,72%
6104	Women's or girls' suits, jackets, dresses, skirts, etc., knitted or crocheted	5 060 003	11,09%
2105	Ice cream and other edible ice, whether or not containing cocoa	3 370 951	10,96%
2208	Undenatured ethyl alcohol less than 80%vol.; spirits, liqueurs, other spirit beverages	13 645 098	10,76%
6303	Curtains (including drapes) and interior blinds; curtain or bed valances	2 441 844	10,66%
7615	Table, kitchen or other household articles and parts thereof, of aluminium; etc.	3 418 438	10,12%
7320	Springs and leaves for springs, of iron or steel	1 967 347	10,02%
7324	Sanitary ware and parts thereof, of iron or steel	3 037 078	9,95%
2008	Fruit, nuts and other edible parts of plants, otherwise prepared or preserved, etc.	6 349 046	9,91%
8803	Parts of goods of HS88.01 or 88.02	12 074 387	9,71%
5705	Other carpets and other textile floor coverings, whether or not made up	1 985 160	9,37%
3206	Other colouring matter; except HS32.03/.04/.05; inorganic products of a kind used as luminophores, etc.	4 819 070	9,32%
7318	Screws, bolts, nuts, coach screws, screw hooks, rivets, etc., of iron or steel	7 129 954	9,31%
7213	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	22 540 446	9,17%
3208	Paints, varnishes (enamels, lacquers) based on synthetic polymers/chemically modified natural polymers, etc.	5 196 589	8,83%
5503	Synthetic staple fibres, not carded, combed or otherwise processed for spinning	3 977 053	8,69%
3303	Perfumes and toilet waters	18 089 842	8,51%
7610	Aluminium structures (excl. prefabricated buildings of HS94.06) and parts of structures, etc.	4 095 402	8,40%
8205	Hand tools, not elsewhere specified or included; blow lamps; vices, clamps, etc.	4 277 190	8,19%
8703	Motor cars and other motor vehicles for the transport of persons (excl. HS87.02)	250 017 072	8,17%
6404	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of textile materials	10 850 625	8,00%
3306	Preparations for oral or dental hygiene, including denture fixative pastes/powders; floss, etc.	6 747 032	7,95%
8704	Motor vehicles for the transport of goods	60 979 152	7,85%
4818	Toilet paper and similar paper, cellulose wadding… for household or sanitary purposes, etc.	14 039 247	7,82%
9404	Mattress supports; articles of bedding and similar furnishing, etc.	2 865 557	7,68%
7307	Tube or pipe fittings (for example, couplings, elbows, sleeves), of iron or steel	4 577 820	7,67%
3402	Organic surface-active agents (except soap); surface-active, washing, cleaning preparations	18 065 870	7,39%
6307	Other made up articles, including dress patterns	3 393 487	7,22%
7117	Imitation jewellery	4 396 709	7,21%
7321	Stoves, ranges, grates, cookers, barbecues, braziers, gas-rings… etc., of iron or steel	4 832 624	7,19%
2903	Halogenated derivatives of hydrocarbons	1 398 696	7,18%
6601	Umbrellas and sun umbrellas, etc.	1 373 229	7,11%

Source: UN Comtrade, 2019

Courtesy: Moroil

APPENDIX B

TRADE OPPORTUNITIES IN SADC AND COMESA

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Appendix B: Trade opportunities in SADC and COMESA

This appendix aims to identify regional export opportunities for Mauritius. Export opportunities were analysed for two African trade blocks, of which Mauritius is a member: SADC and COMESA. It is divided into two sections. The first outlines the methodology used to complete the export analysis, and the second the findings generated.

Methodology

Trade Data was sourced from UN Comtrade during October and November 2019. Product sub-categories to the 4-digit HS code were determined during an internal brainstorming session based on previous experience and existing literature. Data was downloaded and analysed using the statistical software STATA. Table 43 shows the sub-categories included in the analysis.

Table 43: List of product sub-categories

HS Codes	Sub-Category
16 - 24	Food Processing
27 - 38	Chemicals and Chemical Products
39	Plastic Products
40	Rubber Products
42	Leather Products
44	Wood Products
48 - 49	Paper and Paper Products
50 - 67	Clothing and Textiles
7113; 7117	Jewellery
87	Motor Vehicles
88	Aeroplane Parts
9018 - 9022	Medical Devices
94	Furniture

Mauritian export opportunities were identified using a score index. The score index consisted of five indices. To calculate the indices the following process was followed:

First, the 5-year average and the 5-year Compound annual growth rate (CAGR) per product were calculated for:

- The imports of the "Country" concerned in the SADC and COMESA trade blocks
- World trade per product
- The imports for Mauritius
- The Exports for Mauritius

From the above calculations the analysis was then limited using the following criteria:

- The analysis only included major exports. Mauritian products with an export amount of less than US$1 million over a 5-year average were excluded.
- Only major imports of countries in SADC and COMESA were considered. Only products where imports exceeded a 5-year average of US$1 million were included.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Second, a Revealed Comparative Advantage (RCA) was calculated per Mauritian product to determine whether Mauritius has a comparative advantage with respect to export opportunities. This is shown in *Figure 17* below.

Figure 17: Revealed Comparative Advantage (RCA) calculation:

The Revealed Comparative Advantage (RCA) is calculated using the following formula:

$$RCA_{ij} = \frac{(x_{ij}/X_{it})}{(x_{wj}/X_{wt})}$$

Where: $x_{ij} = Country\ i's\ exports\ of\ product\ j$

$x_{wj} = World\ Exports\ of\ product\ j$

$X_{wj} = Country\ i's\ total\ Exports$

$X_{wt} = Worlds's\ total\ Exports$

Source: Balassa, 1965.

An RCA of greater than 1 indicates that South Africa has a comparative advantage in producing these products. The higher the value of the RCA the greater the comparative advantage, however for this study we are not concerned with the magnitude of the comparative advantage and are more concerned with whether a comparative advantage exists for any products.

From this, five indices were created. The indices are Bernoulli indexes and therefore consist of either a 0 if the index criteria is not met and 1 if the criteria is met. The criteria are as follows:

1. Mauritian exports of the product have grown over the last 5 years
2. The SADC/COMESA country's imports of the product have grown over the last 5 years
3. World trade of the product has grown over the last 5 years
4. The SADC/COMESA country's imports are larger than the Mauritian exports of that product
5. Mauritius has a comparative advantage in producing the product with a RCA greater than 1.

For each of these indices each product was evaluated individually. The indices were then summed to create a score index out of 5 in which to rank the export opportunities for Mauritius.

The following two sub-sections present the exports opportunities for Mauritius in two major continental trade blocks: SADC and COMESA. Using the methodology explained above, we found multiple products which could be pursued to realise the goals of the Industrial Policy and Strategic Plan for Mauritius (2020-2025). We have only presented products which scored a 4 or above, as we deemed it necessary that a product needed to meet 80% of the criteria to be considered a viable export opportunity.

SADC

Note that no comparative data was available for The Comoros, The Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar,and Malawi.

Angola

As shown in *Table 44* below Mauritius has numerous potential export opportunities into Angola. Two of the products shown below scored5out of 5 for our index, while the rest scored 4. The Angolan imports of these products are considerably larger than the Mauritian exports of the same products, suggesting that there is a sizable opportunity to gain a larger share of Angolan imports. Furthermore, Mauritius has a comparative advantage in producing all these products listed below as the revealed comparative advantage for these products are all greater than 1.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Table 44: Export Opportunities for Mauritius into Angola

HS Code	Description	Angola Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
2207	Undenatured ethyl alcohol of an alcoholic strength of 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	49 088 456	10 474 098	1	1	1	1	1	5
3401	Soap; organic surface-active products & preparations for use as soap, etc.	56 198 072	2 005 983	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed or otherwise prepared, such as spaghetti, macaroni, etc.	108 240 400	10 911 323	1	0	1	1	1	4
2309	Preparations of a kind used in animal feeding	15 605 472	9 230 665	0	1	1	1	1	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	61 179 680	14 301 419	1	0	1	1	1	4
4821	Paper or paperboard labels of all kinds, whether or not printed	3 916 800	2 671 472	1	1	0	1	1	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	17 864 492	4 250 920	1	0	1	1	1	4
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	56 788 632	21 315 152	1	0	1	1	1	4

Source: UN Comtrade, 2019.

Botswana

Analysis reveals Botswana has multiple export opportunities for Mauritius, with three products scoring 5 on our index. These products are soap, wood caskets/containers and medical instruments. The smaller size of the Botswanan economy compared to that of Angola means that import levels for most of the products are considerably smaller and do not offer as great an opportunity. However, as seen in *Table 45* below Mauritius has a comparative advantage in producing all these goods except for two, Beer and Beauty and make-up products. Therefore, Botswana is still a potentially attractive export destination for these products for Mauritius.

Table 45: Export Opportunities for Mauritius into Botswana

HS Code	Description	Botswana Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3401	Soap; organic surface-active products & preparations for use as soap, etc.	33 408 836	2 005 983	1	1	1	1	1	5
4420	Wood marquetry & inlaid wood; caskets & cases for jewellery or cutlery, & similar articles, of wood	1 690 964	1 104 788	1	1	1	1	1	5
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	22 587 558	21 315 152	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed or otherwise prepared, such as spaghetti, macaroni, etc.	9 980 627	10 911 323	1	1	1	0	1	4
2203	Beer made from malt	18 458 554	1 098 356	1	1	1	1	0	4
2309	Preparations of a kind used in animal feeding	19 989 908	9 230 665	0	1	1	1	1	4
3304	Beauty or make-up preparations & preparations for the care of the skin	22 871 446	3 892 465	1	1	1	1	0	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	20 519 980	14 301 419	1	0	1	1	1	4
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted	6 865 078	8 483 718	1	1	1	0	1	4
6107	Men's or boys' underpants, briefs, nightshirts, pyjamas, etc, knitted or crocheted	1 546 220	1 867 961	1	1	1	0	1	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	4 846 454	4 250 920	1	0	1	1	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Mozambique

As highlighted in Table 46, Mozambique has six products that represent potential export opportunities for Mauritius. However, none of the products scored 5 on our index. All products, except for other garments, knitted or crocheted, represent significant export opportunities. Furthermore, Mauritius has a comparative advantage in producing these goods,except for Beer.

Table 46: Export Opportunities for Mauritius into Mozambique

HS Code	Description	Mozambique Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
2203	Beer made from malt	26 714 560	1 098 356	1	1	1	1	0	4
3401	Soap; organic surface-active products & preparations for use as soap, etc.	10 418 685	2 005 983	1	0	1	1	1	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	29 686 152	14 301 419	1	0	1	1	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, paperboard, etc.	29 339 444	3 406 686	0	1	1	1	1	4
6114	Other garments, knitted or crocheted	2 045 511	5 718 875	1	1	1	0	1	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	11 676 260	4 250 920	1	0	1	1	1	4

Source: UN Comtrade, 2019.

Namibia

The scoring methodology has identified numerous products as Namibian export opportunities for Mauritius. However, only two products scored 5 out of 5 on our index. These products are plastic packaging and men's underwear, etc. However, ten other products scored 4, as presented in *Table 47* below.

Table 46: Export Opportunities for Mauritius into Namibia

HS Code	Description	Namibia Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3923	Articles for the conveyance or packing of goods, of plastics, etc.	38 551 752	14 301 419	1	1	1	1	1	5
6107	Men's or boys' underpants, briefs, nightshirts, pyjamas, etc, knitted or crocheted	3 054 755	1 867 961	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed or otherwise prepared, such as spaghetti, macaroni, etc.	1 936 285	10 911 323	1	1	1	0	1	4
3303	Perfumes & toilet waters	12 334 805	1 578 473	1	1	1	1	0	4
3304	Beauty or make-up preparations & preparations for the care of the skin	34 455 260	3 892 465	1	1	1	1	0	4
3401	Soap; organic surface-active products & preparations for use as soap, etc	24 803 246	2 005 983	1	0	1	1	1	4
4420	Wood marquetry & inlaid wood; caskets & cases for jewellery or cutlery, & similar, of wood	1 668 633	1 104 788	1	0	1	1	1	4
4821	Paper or paperboard labels of all kinds, whether or not printed.	7 387 847	2 671 472	1	1	0	1	1	4
4911	Other printed matter, incl. printed pictures & photographs	8 458 113	6 099 004	1	1	0	1	1	4
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted	12 536 957	8 483 718	1	0	1	1	1	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	8 292 162	4 250 920	1	0	1	1	1	4
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	39 762 368	21 315 152	1	0	1	1	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Seychelles

Seychelles also imports numerous products that represent potential export opportunities for Mauritius. Similar to other SADC countries, the Seychelles only has two products that score 5 out of 5 on our index. These products are soap and aluminium structures. Five other products scored 4, as shown in *Table 48* below.

Table 48: Export Opportunities for Mauritius into Seychelles

HS Code	Description	Seychelles Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3401	Soap; organic surface-active products & preparations for use as soap, etc	2 778 841	2 005 983	1	1	1	1	1	5
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	4 287 552	4 250 920	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed or otherwise prepared, such as spaghetti, macaroni, etc.	1 405 635	10 911 323	1	1	1	0	1	4
3917	Tubes, pipes & hoses, & fittings (joints, elbows, flanges), of plastics	5 005 966	1 954 107	1	1	1	1	0	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	4 629 895	14 301 419	1	1	1	0	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, paperboard	5 153 041	3 406 686	0	1	1	1	1	4
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	4 859 267	21 315 152	1	1	1	0	1	4

Source: UN Comtrade, 2019.

South Africa

A substantial 31 products were noted as export opportunities into South Africa, as seen in *Table 49* below. Most products are aligned with those in other SADC countries, while many of the opportunities scored 4 out of 5 on our index. Importantly, though, seven products scored 5 out of 5, suggesting clear opportunities for Mauritius. These products are pasta, soap, plastic packaging, men's and women's clothing, other clothing, and medical instruments. South Africa is one of the largest economies in Africa and therefore the opportunities are sizable.

There are also a few export opportunities (particularly in the clothing and textiles sector) that are regionally specific to South Africa. These opportunities relate to cotton yarn, synthetic yarn, other knitted and crocheted fabrics, women's coats, suits and blouses, men's shirts, etc and brassieres, etc. These products scored 4 on our index. However, Mauritius does have a comparative advantage in producing these products and the scale of the opportunities identified are significant.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Table 49: Export Opportunities for Mauritius into South Africa

HS Code	Description	SA Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
1902	Pasta, whether or not cooked or stuffed, e.g. spaghetti, macaroni	39 723 368	10 911 323	1	1	1	1	1	5
3401	Soap; organic surface-active products & preparations for use as soap, etc.	66 975 368	2 005 983	1	1	1	1	1	5
3923	Articles for the conveyance or packing of goods, of plastics, etc.	157 565 664	14 301 419	1	1	1	1	1	5
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted	56 729 012	8 483 718	1	1	1	1	1	5
6114	Other garments, knitted or crocheted	8 362 143	5 718 875	1	1	1	1	1	5
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, etc.	247 583 904	44 652 184	1	1	1	1	1	5
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	571 371 328	21 315 152	1	1	1	1	1	5
2203	Beer made from malt	94 167 880	1 098 356	1	1	1	1	0	4
2207	Undenatured ethyl alcohol of alcoholic strength by 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	11 397 996	10 474 098	1	0	1	1	1	4
2309	Preparationsused in animal feeding	139 538 608	9 230 665	0	1	1	1	1	4
3303	Perfumes & toilet waters	83 279 664	1 578 473	1	1	1	1	0	4
3304	Beauty or make-up preparations & preparations for the care of the skin	188 860 112	3 892 465	1	1	1	1	0	4
3405	Polishes & creams, for footwear, furniture, floors, coachwork, glass or metal, scouring pastes & powders, etc.	7 160 995	1 477 581	1	1	0	1	1	4
3917	Tubes, pipes & hoses, & fittings (e.g. joints, elbows, flanges), of plastics	120 272 616	1 954 107	1	1	1	1	0	4
4202	Trunks, suitcases, vanity/executive/brief cases, etc. Of leather/composition leather/other materials	207 352 928	10 479 199	0	1	1	1	1	4
4420	Wood marquetry & inlaid wood; caskets & cases for jewellery or cutlery, & similar articles, of wood	3 450 503	1 104 788	1	0	1	1	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, etc.	61 112 632	3 406 686	0	1	1	1	1	4
4911	Other printed matter, including printed pictures & photographs	41 177 676	6 099 004	1	1	0	1	1	4
5205	Cotton yarn (other than sewing thread), containing 85% or more by weight of cotton, not put up for retail sale	24 044 300	18 014 854	1	1	0	1	1	4
5208	Woven fabrics of cotton, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	56 148 652	9 247 862	1	1	0	1	1	4
5509	Yarn (other than sewing thread) of synthetic staple fibres, not for retail sale	22 521 442	3 167 666	1	1	0	1	1	4
6006	Other knitted or crocheted fabrics	71 491 800	12 280 874	1	1	0	1	1	4
6102	Women's or girls' overcoats, car-coats, capes, cloaks, etc., knitted or crocheted	10 370 612	1 110 893	1	0	1	1	1	4
6104	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, etc.	88 683 688	43 587 680	0	1	1	1	1	4
6105	Men's or boys' shirts, knitted or crocheted	58 902 452	26 827 312	1	1	0	1	1	4
6107	Men's or boys' underpants, briefs, nightshirts, etc., knitted or crocheted	25 022 284	1 867 961	1	0	1	1	1	4
6112	Track suits, ski suits & swimwear, knitted or crocheted	18 752 890	2 266 031	0	1	1	1	1	4
6206	Women's or girls' blouses, shirts & shirt-blouses	68 519 440	7 073 443	0	1	1	1	1	4
6212	Brassieres, girdles, corsets, braces, suspenders, garters & similar articles & parts, knitted or crocheted	42 519 600	5 471 345	0	1	1	1	1	4
7601	Unwrought aluminium	93 503 880	1 241 720	1	1	1	1	0	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	29 558 512	4 250 920	1	0	1	1	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Tanzania

Only three export opportunities were identified for Tanzania. The products are men's clothing, aluminium structures, and medical instruments. Each of these products scored 4 on our index, as shown in *Table 50* below.

Table 50 Export Opportunities for Mauritius into Tanzania

HS Code	Description	Tanzania Imports ($)	Mauritius Exports ($)	X growth >0	I Growth >0	World growth >0	I > X	RCA >1	Score
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted.	4 042 287	8 483 718	1	1	1	0	1	4
7601	Unwrought aluminium.	8 573 274	1 241 720	1	1	1	1	0	4
9018	Instruments & appliances used in medical, surgical, dental or veterinary sciences.	62 195 508	21 315 152	1	0	1	1	1	4

Source: UN Comtrade, 2019.

Zambia

Soap and aluminium structures scored 5 out of 5 as Zambian export opportunities, with a further ten Mauritian products scoring 4 out of 5; as shown in *Table 51* below.

Table 51: Export Opportunities for Mauritius into Zambia

HS Code	Description	Zambia Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3401	Soap; organic surface-active products & preparations for use as soap, etc.	14 646 598	2 005 983	1	1	1	1	1	5
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	4 361 453	4 250 920	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed, e.g. spaghetti, macaroni.	6 419 476	10 911 323	1	1	1	0	1	4
2203	Beer made from malt.	17 363 980	1 098 356	1	1	1	1	0	4
2309	Preparations used in animal feeding	16 305 140	9 230 665	0	1	1	1	1	4
3304	Beauty or make-up preparations & preparations for the care of the skin	6 898 916	3 892 465	1	1	1	1	0	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	22 231 248	14 301 419	1	0	1	1	1	4
4821	Paper or paperboard labels of all kinds, whether or not printed	7 112 910	2 671 472	1	1	0	1	1	4
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted	3 059 566	8 483 718	1	1	1	0	1	4
6114	Other garments, knitted or crocheted	3 273 505	5 718 875	1	1	1	0	1	4
6204	Women's or girls' suits, ensembles, jackets, dresses, skirts, etc.	3 220 920	44 652 184	1	1	1	0	1	4
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	19 599 728	21 315 152	1	1	1	0	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Zimbabwe

As shown in *Table 52* below, Mauritius has five potential export opportunities into Zimbabwe, with two of the products scoring 5 on the index. These products are pasta and plastic packaging. However, Mauritius has a comparative advantage in producing all the goods presented in Table 52.

Table 52: Export Opportunities for Mauritius into Zimbabwe

HS Code	Description	Zimbabwe Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
1902	Pasta, whether or not cooked or stuffed, etc. e.g. spaghetti, macaroni	15 413 368	10 911 323	1	1	1	1	1	5
3923	Articles for the conveyance or packing of goods, of plastics, etc.	41 539 692	14 301 419	1	1	1	1	1	5
3401	Soap; organic surface-active products and preparations for use as soap, etc	24 678 682	2 005 983	1	0	1	1	1	4
7610	Aluminium structures and parts of structures; aluminium plates, rods, profiles, tubes and the like	2 703 047	4 250 920	1	1	1	0	1	4
9018	Instruments and appliances used in medical, surgical, dental, vet sciences	28 881 798	21 315 152	1	0	1	1	1	4

Source: UN Comtrade, 2019.

COMESA

To avoid repetition, COMESA members that are also SADC members (Seychelles, Zambia and Zimbabwe) have not been included in this section. Furthermore, the Comoros, The Democratic Republic of the Congo, Djibouti, Ethiopia, Eswatini, Libya, Madagascar, Malawi, Rwanda, Somalia, Sudan and Tunisia were not reported as there was no data for these countries.

Burundi

As highlighted in Table 53, Burundi has two export opportunities for Mauritius. These opportunities are for plastic packaging and medical instruments. These products score 4 on our index. Burundi imports are smaller than Mauritian exports for these products. However, Mauritian exports, Burundi imports and word trade of these products have all grown over the last five years, while Mauritius also has a revealed comparative advantage in producing these two products.

Table 53: Export Opportunities for Mauritius into Burundi

HS Code	Description	Burundi Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3923	Articles for the conveyance or packing of goods, of plastics, etc.	4 186 591	14 301 419	1	1	1	0	1	4
9018	Instruments &appliances used in medical, surgical, dental, vet sciences	7 190 904	21 315 152	1	1	1	0	1	4

Source: UN Comtrade, 2019

Egypt

Egypt has numerous export opportunities for Mauritius; and third to South Africa and Kenya, appears to hold the most regional export opportunity for Mauritian manufacturers. The bulk of the opportunities presented in *Table 54* are consistent with those presented for other COMESA and SADC economies. Only three products score 5 out of 5 on the index: pasta, plastic packaging and medical instruments.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Table 54: Export Opportunities for Mauritius into Egypt

HS Code	Description	Egypt Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World Growth >0	I > X	RCA >1	Score
3401	Soap; organic surface-active products & preparations for use as soap, etc	14 307 990	2 005 983	1	1	1	1	1	5
3923	Articles for the conveyance or packing of goods, of plastics; stoppers, lids, caps & other closures, of plastics	30 343 938	14 301 419	1	1	1	1	1	5
9018	Instruments & appliances used in medical, surgical, dental or veterinary sciences	59 829 280	21 315 152	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed, etc. e.g. spaghetti, macaroni	17 011 178	10 911 323	1	0	1	1	1	4
2203	Beer made from malt.	7 884 073	1 098 356	1	1	1	1	0	4
2207	Undenatured ethyl alcohol of an alcoholic strength of 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	16 678 510	10 474 098	1	0	1	1	1	4
2208	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol.; spirits, liqueurs & other spirituous beverages	34 474 632	4 927 832	1	1	0	1	1	4
2309	Preparations of a kind used in animal feeding	45 923 584	9 230 665	0	1	1	1	1	4
3303	Perfumes & toilet waters	6 222 412	1 578 473	1	1	1	1	0	4
3304	Beauty or make-up preparations & preparations for the care of the skin	8 054 758	3 892 465	1	1	1	1	0	4
3917	Tubes, pipes & hoses, & fittings therefor (for example, joints, elbows, flanges), of plastics	20 458 734	1 954 107	1	1	1	1	0	4
4202	Trunks, suitcases, vanity/executive/briefcases, etc. Of leather or composition leather or other materials	21 298 006	10 479 199	0	1	1	1	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, paperboard, etc.	18 521 600	3 406 686	0	1	1	1	1	4
4821	Paper or paperboard labels of all kinds, whether or not printed	9 196 198	2 671 472	1	1	0	1	1	4
4911	Other printed matter, including printed pictures & photographs	11 395 668	6 099 004	1	1	0	1	1	4
5509	Yarn (other than sewing thread) of synthetic staple fibres, not put up for retail sale	21 444 770	3 167 666	1	1	0	1	1	4
6006	Other knitted or crocheted fabrics	63 167 056	12 280 874	1	1	0	1	1	4
6103	Men's or boys' suits, ensembles, jackets, blazers, etc, knitted or crocheted	3 770 453	8 483 718	1	1	1	0	1	4
6107	Men's or boys' underpants, briefs, nightshirts, pyjamas, etc, knitted or crocheted	1 146 478	1 867 961	1	1	1	0	1	4
6114	Other garments, knitted or crocheted.	1 816 795	5 718 875	1	1	1	0	1	4
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, etc.	20 907 078	44 652 184	1	1	1	0	1	4
7601	Unwrought aluminium.	20 528 140	1 241 720	1	1	1	1	0	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like, prepared for use in structures	13 251 815	4 250 920	1	0	1	1	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Kenya

There are twenty-three products that were identified as export opportunities into Kenya. These are presented in *Table 55*. As per Egypt; soap, plastic packaging, and medical instruments score 5 out of 5 on our index. These products exhibit sizable opportunities, as Kenyan imports of these products are considerably larger than Mauritian exports. All other opportunities identified scored 4 on the index.

Table 55: Export Opportunities for Mauritius into Kenya

HS Code	Description	Kenya Imports ($)	Mauritius Exports ($)	X growth >0	I Growth >0	World growth >0	I > X	RCA >1	Score
3401	Soap; organic surface-active products & preparations for use as soap, etc	14 307 990	2 005 983	1	1	1	1	1	5
3923	Articles for the conveyance or packing of goods, of plastics,etc.	30 343 938	14 301 419	1	1	1	1	1	5
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	59 829 280	21 315 152	1	1	1	1	1	5
1902	Pasta, whether or not cooked or stuffed, etc. e.g. spaghetti, macaroni	17 011 178	10 911 323	1	0	1	1	1	4
2203	Beer made from malt	7 884 073	1 098 356	1	1	1	1	0	4
2207	Undenatured ethyl alcohol of an alcoholic strength of 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	16 678 510	10 474 098	1	0	1	1	1	4
2208	Undenatured ethyl alcohol of an alcoholic strength of less than 80% vol.; spirits, liqueurs & other spirituous beverages	34 474 632	4 927 832	1	1	0	1	1	4
2309	Preparations used in animal feeding	45 923 584	9 230 665	0	1	1	1	1	4
3303	Perfumes & toilet waters	6 222 412	1 578 473	1	1	1	1	0	4
3304	Beauty or make-up preparations & preparations for the care of the skin	8 054 758	3 892 465	1	1	1	1	0	4
3917	Tubes, pipes & hoses, & fittings (joints, elbows, flanges), of plastics	20 458 734	1 954 107	1	1	1	1	0	4
4202	Trunks, suit/vanity/executive/briefcases, etc. Of leather or composition leather or other materials	21 298 006	10 479 199	0	1	1	1	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, etc.	18 521 600	3 406 686	0	1	1	1	1	4
4821	Paper or paperboard labels of all kinds, whether or not printed	9 196 198	2 671 472	1	1	0	1	1	4
4911	Other printed matter, including printed pictures & photographs	11 395 668	6 099 004	1	1	0	1	1	4
5509	Yarn (other than sewing thread) of synthetic staple fibres, not for retail sale	21 444 770	3 167 666	1	1	0	1	1	4
6006	Other knitted or crocheted fabrics.	63 167 056	12 280 874	1	1	0	1	1	4
6103	Men's or boys' suits, ensembles, jackets, etc, knitted or crocheted	3 770 453	8 483 718	1	1	1	0	1	4
6107	Men's or boys' underpants, briefs, nightshirts, etc., knitted or crocheted	1 146 478	1 867 961	1	1	1	0	1	4
6114	Other garments, knitted or crocheted	1 816 795	5 718 875	1	1	1	0	1	4
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, etc.	20 907 078	44 652 184	1	1	1	0	1	4
7601	Unwrought aluminium	20 528 140	1 241 720	1	1	1	1	0	4
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes & the like	13 251 815	4 250 920	1	0	1	1	1	4

Source: UN Comtrade, 2019.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Uganda

Uganda has numerous products that present themselves as export opportunities for Mauritius. None of the products scored 5 for our index. However, Mauritius has a comparative advantage in producing the majority of the products shown in Table 56 below.

Table 56: Export Opportunities for Mauritius into Uganda

HS Code	Description	Uganda Imports ($)	Mauritius Exports ($)	X Growth >0	I Growth >0	World growth >0	I > X	RCA >1	Score
1902	Pasta, whether or not cooked or stuffed, etc.e.g. spaghetti, macaroni	5 740 432	10 911 323	1	1	1	0	1	4
2207	Undenatured ethyl alcohol of an alcoholic strength by 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	18 410 268	10 474 098	1	0	1	1	1	4
2309	Preparations of a kind used in animal feeding	9 739 996	9 230 665	0	1	1	1	1	4
3304	Beauty or make-up preparations & preparations for the care of the skin	10 130 152	3 892 465	1	1	1	1	0	4
3401	Soap; organic surface-active products & preparations for use as soap, etc.	9 918 119	2 005 983	1	0	1	1	1	4
3405	Polishes & creams, for footwear, furniture, floors, coachwork, glass or metal, scouring pastes & powders, etc.	2 198 733	1 477 581	1	1	0	1	1	4
3917	Tubes, pipes & hoses, & fittings (e.g. joints, elbows, flanges), of plastics	4 926 885	1 954 107	1	1	1	1	0	4
3923	Articles for the conveyance or packing of goods, of plastics, etc.	30 886 470	14 301 419	1	0	1	1	1	4
4202	Trunks, suit/vanity/executive/brief-cases, etc. Of leather or composition leather or other materials	12 763 819	10 479 199	0	1	1	1	1	4
4819	Cartons, boxes, cases, bags & other packing containers, of paper, etc.	24 318 456	3 406 686	0	1	1	1	1	4
6114	Other garments, knitted or crocheted	2 152 062	5 718 875	1	1	1	0	1	4
6204	Women's or girls' suits, ensembles, jackets, dresses, skirts, etc.	3 781 609	44 652 184	1	1	1	0	1	4
7601	Unwrought aluminium.	4 230 917	1 241 720	1	1	1	1	0	4
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	42 772 720	21 315 152	1	0	1	1	1	4

Source: UN Comtrade, 2019.

Summary

The products presented in Table 57 represent *the key regional* export opportunities identified for SADC and COMESA. As revealed, Mauritius has a revealed comparative advantage (RCA) in producing numerous products across a variety of different sectors. However, Mauritius does not have an RCA for all the products identified. However, this should not deter further investigation of opportunities in these product categories, especially as regional value chain dynamics may be distinct from established global linkages. As further highlighted in the table, many of the regional export opportunities are also very substantial, with the total sum of imports multiple times Mauritian exporting levels. Finding niches within regional markets could therefore support major production growth in Mauritius. The findings presented in Table 57 consequently suggest major regional exporting opportunities for Mauritius, thereby supporting the stakeholder findings secured from the missions.

APPENDIX B
TRADE OPPORTUNITIES IN SADC AND COMESA

Table 57: Summary of Mauritius' Regional Export Opportunities

HS Code	Description	Countries	Sum of Imports ($)	Mauritius Exports ($)	RCA >1
1902	Pasta, whether or not cooked or stuffed, etc. e.g. spaghetti, macaroni	SA, Kenya, Seychelles, Uganda, Zambia, Zimbabwe, Angola, Botswana, Namibia	205 870 752	10 911 323	1
2203	Beer made from malt	SA, Kenya, Zambia, Botswana, Mozambique, Tanzania	176 429 120	1 098 356	0
2207	Undenatured ethyl alcohol of an alcoholic strength of 80% vol. or higher; ethyl alcohol & other spirits, denatured, of any strength	SA, Egypt, Kenya, Uganda, Angola	97 313 232	10 474 098	1
2208	Undenatured ethyl alcohol of an alcoholic strength less than 80% vol.; spirits, liqueurs, etc.	Kenya	34 474 632	4 927 832	1
2309	Preparations used in animal feeding	SA, Egypt, Kenya, Uganda, Zambia, Angola, Botswana	429 219 136	9 230 665	1
3303	Perfumes & toilet waters	SA, Egypt, Kenya, Namibia	129 825 320	1 578 473	0
3304	Beauty or make-up preparations & preparations for the care of the skin	SA, Egypt, Kenya, Uganda, Zambia, Botswana, Namibia	314 932 992	3 892 465	0
3401	Soap; organic surface-active products & preparations for use as soap, etc.	SA, Egypt, Kenya, Seychelles, Uganda, Zambia, Zimbabwe, Angola, Botswana, Mozambique, Namibia, Tanzania	332 206 880	2 005 983	1
3405	Polishes & creams, for footwear, furniture, floors, coachwork, glass or metal, scouring pastes & powders, etc.	SA, Uganda, Tanzania	11 025 133	1 477 581	1
3917	Tubes, pipes & hoses, & fittings (e.g. joints, elbows, flanges), of plastics.	SA, Egypt, Kenya, Seychelles, Uganda, Tanzania	292 249 792	1 954 107	0
3923	Articles for the conveyance or packing of goods, of plastics, etc.	SA, Burundi, Egypt, Kenya, Seychelles, Uganda, Zambia, Zimbabwe, Botswana, Mozambique, Namibia, Angola, Tanzania	560 672 896	14 301 419	1
4202	Trunks, suit/vanity/executive/brief-cases, etc. Of leather or composition leather or other materials	SA, Egypt, Kenya, Uganda, Tanzania	308 745 440	10 479 199	1
4420	Wood marquetry & inlaid wood; caskets & cases for jewellery/cutlery; similar wood articles	SA, Egypt, Botswana, Namibia	7 875 590	1 104 788	1
4819	Cartons, boxes, cases, bags & other packing containers, of paper, etc.	SA, Egypt, Kenya, Seychelles, Uganda. Mozambique	252 974 864	3 406 686	1
4821	Paper or paperboard labels of all kinds, whether or not printed.	Kenya, Zambia, Angola, Namibia, Tanzania	33 567 056	2 671 472	1
4911	Other printed matter, including printed pictures & photographs.	SA, Egypt, Kenya, Namibia	92 636 080	6 099 004	1
5205	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not for retail sale	SA, Egypt	242 107 696	18 014 854	1
5208	Woven cotton fabrics, containing 85% or more by weight of cotton, weighing not more than 200 g/m2	SA, Egypt, Tanzania	97 632 992	9 247 862	1
5509	Yarn (other than sewing thread) of synthetic staple fibres, not for retail sale	SA, Egypt, Kenya	136 185 952	3 167 666	1
6006	Other knitted or crocheted fabrics	SA, Egypt, Kenya	198 190 400	12 280 874	1
6102	Women's or girls' overcoats, car-coats, capes, cloaks, etc., knitted or crocheted	SA, Egypt	12 137 123	1 110 893	1
6103	Men's or boys' suits, ensembles, jackets, etc., knitted or crocheted	SA, Kenya, Zambia, Botswana, Namibia, Tanzania	87 003 352	8 483 718	1
6104	Women's or girls' suits, ensembles, jackets, dresses, skirts, etc.	SA	88 683 688	43 587 680	1
6105	Men's or boys' shirts, knitted or crocheted	SA	58 902 452	26 827 312	1
6107	Men's or boys' underpants, briefs, nightshirts, etc, knitted or crocheted	SA, Egypt, Kenya, Botswana, Namibia	33 361 990	1 867 961	1
6112	Track suits, swimwear, knitted or crocheted	SA	18 752 890	2 266 031	1
6114	Other garments, knitted or crocheted	SA, Kenya, Uganda, Zambia, Mozambique	17 650 016	5 718 875	1
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, etc.	SA, Egypt, Kenya, Uganda, Zambia	395 326 336	44 652 184	1
6206	Women's or girls' blouses, shirts, etc.	SA	68 519 440	7 073 443	1
6212	Brassieres, girdles, corsets, braces, garters,etc. whether or not knitted or crocheted	SA, Egypt	51 568 464	5 471 345	1
7601	Unwrought aluminium	SA, Egypt, Kenya, Uganda, Tanzania	172 567 552	1 241 720	0
7610	Aluminium structures & parts of structures; aluminium plates, rods, profiles, tubes, etc.	SA, Egypt, Kenya, Seychelles, Zambia, Angola, Zimbabwe, Botswana, Mozambique, Namibia	107 730 224	4 250 920	1
9018	Instruments & appliances used in medical, surgical, dental, vet sciences	SA, Burundi, Egypt, Kenya, Seychelles, Uganda, Zambia, Zimbabwe, Angola, Botswana, Namibia, Tanzania	1224 809 472	21 315 152	1

Source: UN Comtrade, 2019.

Courtesy: Moroil

APPENDIX C

MAURITIUS' EXISTING SUITE OF INCENTIVES FOR THE INDUSTRIAL SECTOR

APPENDIX C
MAURITIUS' EXISTING SUITE OF INCENTIVES FOR THE INDUSTRIAL SECTOR

Appendix C: Mauritius' existing suite of incentives for the industrial sector

The support provided to the Mauritian industrial sector is largely corporate income tax based, with firms receiving reductions on their corporate income obligations through the various incentives offered. The challenge with this approach is that Mauritius is a low-tax operating environment, making it easy for firms for achieve a zero tax position. Once this is achieved, there are very few incentives to support upgrading and the development of more advanced technological capabilities. Mauritius' low comparative tax position is illustrated in Table 58[1].As highlighted, Mauritius' taxes are substantially lower than those of competitors, including major economies like the United States and Germany and the average for regional (Sub-Sharan African) competitors.

Table 58: Country Comparison of corporate taxation obligations

Indicator	Mauritius	Sub-Saharan Africa	United States	Germany
Number of payments of taxes per year	8.0	38.8	10.6	9.0
Time taken for administrative formalities (hours)	152.0	304.2	175.0	218.0
Total share of taxes (as a % of Profit)	22.1	47.0	43.8	49.0

Source: Doing Business - latest available data.

Mauritius' suite of existing incentives for manufacturers and the broader industrial sector is unpacked below, focusing on (a) the promotion of innovation and R&D, (b) direct support for manufacturing, and (c) other corporate income tax benefits.

(a) Promotion of Innovation and R&D

In recent years, the Mauritian government has implemented several measures to support innovation in the economy. Most notably, the government has introduced the Innovation Box Regime[2], the double deduction on R&D Expenses[3], and an Industrial Property Bill[4]. In addition, the national government has budgeted for several measures to incentivise R&D and innovation in the economy, including a move towards developing Artificial Intelligence and blockchain technologies. These include:

- Setting up a Mauritius Artificial Intelligence Council (MAIC), comprising public and private sector participants.
- The establishment of a scholarship for 50 students specialising in AI and other digital technology courses.
- The provision of coding training for 2,000 more primary school students, and 2,500 more secondary school students
- The provision of special electricity rates to accredited date centre operators that having at least a Tier 3 infrastructure
- The establishment of a Mauritius Innovation and Entrepreneurship Framework for young investors and entrepreneurs to push ideas into the market, adopt state-of-the art technologies to build prototypes, support the raising of capital, and the establishment of free service to SMEs that are attempting to operate internationally via an online presence

[1] Source: Mauritius Trade Easy [Online]. Available at: http://www.mauritiustrade.mu/en/trading-with-mauritius/mauritius-investing-in-mauritius.

[2] Newly set-up companies that are engaged in innovation-driven activities will be granted an eight-year tax holiday on income derived from their intellectual property assets developed in Mauritius. As from 10 June 2019, existing companies benefit from an eight-year tax holiday on income derived from their intellectual property assets developed in Mauritius.

[3] During the period from 1 July 2017 to 30 June 2022, if a manufacturer has incurred any qualifying expenditure on R&D that is directly related to its existing trade or business, it may, in the tax year in which the qualifying expenditure was incurred, deduct twice the amount of the expenditure, provided that the R&D is carried out in Mauritius and no annual allowances have been claimed on the same amount. The term 'qualifying expenditure' means any expenditure relating to R&D, including expenditure on innovation, improvement, or development of a process, product, or service as well as staff costs, consumable items, computer software directly used in R&D, and development and subcontracted R&D.

[4]on July 30, 2019, the Mauritian government passed the Industrial Property Bill, aimed at updating and strengthening the protection of intellectual property rights, as well as harmonizing the current legislation to meet the challenges of a globalised industry. The Industrial Property Act 2019 consolidates all industrial property–related issues in one statute.

APPENDIX C
MAURITIUS' EXISTING SUITE OF INCENTIVES FOR THE INDUSTRIAL SECTOR

(b) Direct manufacturing support

The Mauritian government provides a range of direct support to manufacturers, including:

- The development of industrial parks including High-Tech Park at Cote d'Or, Logistics park at Riche Terre and Pharmaceutical and Life Sciences Park at Rose Belle
- Economic diplomacy and mechanisms to address issues of dumping
- Supporting food safety in the domestic market by ensuring certain food items not allowed to enter if only less than 50% of expiry date is left
- Establishing higher standards of quality and safety for imported products
- Exemption of VAT on import of machinery and equipment if the amount payable is Rs. 150,000 or more

More recently, the Mauritian government has introduced additional support measures, including measures to promote local manufacturing SMEs. This includes a grant of Rs. 5,000 for certification under the 'Made in Moris' label, and the increase in the margin of preference on public procurement from 20% to 30% for companies having the 'Made in Moris' label. The Government is considering the restructuring of its Investment Support Programme (ISP), with Rs. 1 billion earmarked to support enterprises considering the adoption of new technologies. The refund of training costs for professional development of employees (HRDC) has also increased from 60% to 70% percent and 75% where the employer is an SME. Finally, the government is supporting manufacturers through the discounted rental of state land.

This is per the following:

- 75% reduction in annual rent for first 10 years of lease for a promoter implementing a private health institution or ayurvedic wellness Centre project
- 50% reduction in annual rent for first 10 years of lease for a company taking over a manufacturing company in receivership or liquidation if acquirer is being required to pay increased rental under a new lease agreement, and provided conditions relating to the safeguarding of employment are met.

(c) Other corporate income tax benefits

Freeport[5] Regime

Freeport operators and private Freeport developers in Mauritius are no longer exempt from income tax. However, Freeport licences issued on or before the 14th of June 2018 continue to benefit from any tax exemptions until the 30th of June 2021.Effective from the 1st of July 2020, Freeport operators or private Freeport developers engaged in the manufacture of goods are liable to tax at the rate of 3% from the sale of goods in the local market, provided certain conditions are met. Freeport operators are also liable to Corporate Social Responsibility (CSR) on local sales.

Manufacture of pharmaceutical products, medical devices

An income tax exemption is available for companies set up on or after the 8th of June 2017 for the manufacture of pharmaceutical products, medical devices, and other high-technology products. This exemption also applies for eight tax years, starting from the tax year in which the company starts its operations.

Green economy

Income derived from the exploitation and use of deep ocean water for air conditioning installations, facilities, and services are also exempted for eight tax years. In addition, a company incurring expenditure on deep ocean water air conditioning may deduct from its gross income twice the amount of the expenditure incurred in that tax year. That deduction is allowed for five consecutive tax years, starting from the initial year of expenditure. Another tax exemption has been granted for interest derived by individuals and companies from debentures or bonds issued by a company to finance renewable energy projects (the issue must be approved by the Director General of the MRA).If a company incurs expenditure in a tax year for the acquisition and setting up of a water desalination plant, it may deduct from its gross income twice the amount of the expenditure incurred in that tax year.

[5]The Mauritius Freeport is a duty-free logistics, distribution and marketing hub for the region. Logistics and warehousing facilities are readily available for the transhipment, consolidation, storage and minor processing of goods.The Freeport legislation provides for a comprehensive package of fiscal and non-fiscal incentives for companies, including: zero percent corporate tax, preferential markets access (subject to meeting rules of origin requirements), exemption from customs duties on all goods imported into the Freeport zones, free repatriation of profits, access to offshore banking facilities, reduced port handling charges for all goods destined for re-export, and 100% foreign ownership.

APPENDIX C
MAURITIUS' EXISTING SUITE OF INCENTIVES FOR THE INDUSTRIAL SECTOR

Export of goods and global trading activities

A reduced corporate tax rate has been introduced for exports of goods so that if, in a tax year, a company is engaged in the export of goods, it will be liable to income tax at the reduced rate of 3% on the chargeable income attributable to that export.

Import of Goods in Semi Knocked Down Form

Companies importing goods in semi knocked down form are entitled to an investment tax credit of 5% over three years (up to 30 June 2020) on the acquisition of new plant and machinery, excluding motor cars, are subject to a local value add of at least 20%. Tax credits will be available on investments up to the 30th of June 2020.

APPENDIX D

PLAN OF ACTION

Compiled by the Ministry Industrial Development,
SMEs and Cooperatives (Industrial Development Division)

APPENDIX D
PLAN OF ACTION

INDUSTRY FOUNDATIONS											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPIs***	***Lead implementer(s)***	***Budget Impact***
		1=high 2=med 3=low	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**				
Strategic Objective 1: To enable existing skills development system to meet range and depth of industry requirements												
1.1 Ensure that STEM and academic triangle support manufacturing sector	1.1.1 Establish a manufacturing sector skills development roadmap	**2**							Industry	No. of new trainees	HRDC & MOIDSC	Funding for roadmap
Strategic Objective 2: To address the need for skilled expatriate professionals and operators												
2.1 Improve flexibility in labour market	2.1.1 Develop an expatriate permit expediting process allowing firms to respond to rapid market demand shifts	**1**							Operators	% increase in permits granted	MOLHRDT	Resourcing of expediting process
	2.1.2 Develop a labour market flexibility framework that enhances the ability of manufacturers to adjust their capacity to market shifts	**2**							Operators	Framework established	MOLHRDT	None. Stakeholder engagement process
Strategic Objective 3: To align soft infrastructure with evolving manufacturing requirements												
3.1 To strengthen the National Quality Infrastructure with the introduction of new accreditation schemes	3.1.1 Develop domestic accreditation capabilities for domestic and international market supply and ensure associated enforcement	**3**							Operators	No. of new accreditation schemes developed and launched	MAURITAS	Funding required
3.2 Upgrade the IT infrastructure being provided to industrial estates	3.2.1 Develop a digital roadmap for priority manufacturing sectors and ensure digital infrastructure is in place for evolving business models	**3**							Industry	Digital roadmap prepared and improvement in IT infrastructure	MOITCI & MOIDSC	Funding for roadmap and infrastructure gaps
Strategic Objective 4: To upgrade hard infrastructure to international levels												
4.1 To provide world class industrial estates	4.1.1 Review the standard of industrial estates; and advance standards to those of leading industrial estates globally	**3**							Industry	Standard of industrial estates upgraded	EDB & Landscope	Resources for upgrading industrial estates
4.2 To position our logistics infrastructure within global value chains	4.2.1 Review port operations and align costs and performance standards with leading merchandise ports internationally	**3**							Operators	Performance of CHCL/MPA and % increase in volume of cargo handled	MPA & CHCL	None. Engagement process with MPA/CHCL

APPENDIX D
PLAN OF ACTION

DOMESTIC ENTERPRISES											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2=med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
Strategic Objective 1: Establishment of Domestic market conformance certification and legislation of circular economy												
1.1. Conformity to local standards	1.1.1. Initiate a domestic market certification process for food processing and FMCG products that encourages sustainable local production	**2**							Operators	Certification process in place and No. of certifications	MSB	Process to be reinforced
	1.1.2. Imported products such as *edible oil,* juice, *paints, detergents, toothpaste and lightings* should mandatorily conform to relevant Mauritian standards as is currently applicable to local products to ensure a level playing field.	**1**							Operators	No. of products conformed to standards	MSB & MRA	Process to be put in place
	1.1.3. Provision of a double deduction on the cost of acquisition of patents and franchises and also the costs incurred to comply with international quality standards and norms	**1**							Operators	Scheme established	MOFEPD	Process to be put in place
	1.1.4. Engage consultations with relevant stakeholders to decide way forward for the preparation of the legal framework in respect of Circular Economy.	**1**							Public & private sector stakeholders	Legislation enacted	MOESWCC	Process to be put in place
Strategic Objective 2: Promote Supermarket localisation advocacy and support for the Made in Moris label												
2.1. Encourage Fair purchasing practices amongst Mauritian supermarkets/hypermarkets.	2.1.1. Ensure the Mauritian Competition Authority maintains close vigil over the purchasing practices of Mauritius' growing supermarket chains; and can immediately respond to evidence of monopsonic trade practices	**2**							Operators	Process initiated	CCM	Process to be put in place
	2.1.2. Mauritian government to amplify the visibility of local production by engaging with supermarket chains on supporting local production potential, and by exploring support for the Made in Moris label with the private sector	**2**							Operators	Visibility enhanced & Increase in No. of products labelled Made in Moris	MCCI /AMM	Process ongoing
	2.1.3. 10% Mandatory Shelf Space to be provided by hypermarkets and supermarkets in Mauritius to locally manufactured goods (Budget 2020-2021)	**1**							Operators	Scheme established	MOCCP	Process ongoing
	2.1.4. Enact appropriate legislations and impose quotas where needed to protect and promote products manufactured locally (Budget 2020-2021)	**1**							Operators	Legislations enacted& No. of products protected	MOIDSC & ITD	Process ongoing

APPENDIX D
PLAN OF ACTION

DOMESTIC ENTERPRISES											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2=med 3= low	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**				
Strategic Objective 3: Encourage designationof local manufacturing for selected government procurement												
3.1. Preferential procurement for local production	3.1.1. Mauritian Government to investigate the designation of locally manufactured products for selected government procurement contracts	**2**							Operators	No. of products designated	MOIDSC	Process to be put in place
	3.1.2. Requirement for Ministries and Government Bodies to have a minimum domestic content of 30% in their purchases of goods, wherever possible (Budget 2020-2021)	**1**							Government and Local manufacturers	Scheme established	MOFEPD	Process already in place
	3.1.3. Provision for a Margin of Preference of 20% on public purchases to all local manufacturing companies and 30% for manufacturing SMEs (Budget 2020-2021)	**1**							Operators	Scheme established	MOFEPD	Process already in place
Strategic Objective 4: Support monitoring and evaluation of PTAs, with rapid response to identified aberrations												
4.1. PTA signed with different countries	4.1.1 Review Mauritius' M&E of PTAs, and establish remediation processes that protect local manufacturers during investigations	**1**							Operators	No. of PTAs reviewed & products protected	ITD	Process to be put in place
Strategic Objective 5: Initiate exploration of manufacturing servicification models and diversification of the sector												
5.1. Diversifying into manufacturing servicification	5.1.1. Explore potential domestic manufacturing servicification models and develop appropriate market regulations that provide an advantage for these models over standard production and/or consumption models.	**3**							Operators	No. of new models identified	MOIDSC	Process to be put in place
5.2. Productivity Enhancement	5.2.1. Introduce productivity improvement programmes for local manufacturers to address low productivity and quality.	**2**							Operators	No. of beneficiaries	NPCC	Funding required
5.3. Financial schemes to encourage local production	5.3.1. Extension of the investment tax credit of 15 percent over 3 years to all manufacturing companies. (Budget 2020-2021)	**1**							Operators	Scheme established	MOFEPD	Funding required
	5.3.2. Provision of financial support by ISP Ltd to enterprises producing hygienic goods such as sanitizers, PPEs, masks, handwash, and medical devices. (Budget 2020-2021)	**1**							Operators	Scheme established	ISP Ltd	Funding required
5.4. Research and Development	5.4.1. R & D to be encouraged in local enterprises (see Manufacturing Upgrading Fund (MUF), Modernisation Investment Support Fund (MISF) and Technology Innovation Incentive (TII) – Recommendations 8-10 in Report)	**3**							Operators	Scheme set up	MRIC	MUF- Rs. 1.9 bn over 5 years MISF- Rs. 4.4 bn for 5years

APPENDIX D
PLAN OF ACTION

TEXTILE AND CLOTHING											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
Strategic Objective 1: Develop adequate human capital in line with industry and market needs												
1.1 Enhance skills development	1.1.1 Promote technical occupations and basic mechanical/technical skills in the sector including electrical and chemical engineering covering mid-level technicians	**1**							Operators	New skills promoted	HRDC	Funding required
	1.1.2 Setting up a good communication strategy in enterprises through increased frequency of counselling with workers	**2**							Operators and workers	No. of counselling sessions effected	Operators	Process to be put in place
	1.1.3 Creation of career paths for workers	**2**							Workers	Career paths created	Operators	Process to be put in place
	1.1.4 Introduction of a Minimum wage for technicians to attract youngsters	**2**							Operators	Minimum wage introduced	MOLHRDT	Funding required
	1.1.5 Increase training programmes in the sector, such as the Dual Training Programme (DTP)	**2**							Operators	No. of Training programmes set up	MOLHRDT & Private sector	Process to be put in place
	1.1.6 Set up Authorisation and Certification frameworks for technical level occupations such as electricians, plumbers, mechanicians, air conditioner technicians, electronic technicians, technologists and others through establishment of a Standard Setting Body (e.g a Sector Skill Council in the field of textile and clothing for establishing national standards and qualifications.	**2**							Operators and workers	No. of new technicians accredited/certified	MQA	Process to be put in place
	1.1.7 Incentivise firms to employ workers (high skilled), on a cost-sharing basis by both government and private enterprises. This could also incentives to employ foreign workers in maintenance of machines	**2**							Operators	Incentives established	MOLHRDT	Funding required
1.2 Facilitate Work Permits	1.2.1 Extension of the current 8-year working permit	**2**							Operators	Scheme extended	MOLHRDT	Process to be put in place
1.3 Improve productivity	1.3.1 Enhance productivity (multi-factor) in the sector	**1**							Operators	Productivity enhanced	NPCC	Funding required
Strategic Objective 2: Create a more enabling business environment for the development of the sector and promote FDI												
2.1 Facilitate supply of raw materials	2.1.1 Setting up of Yarn Bank- a localised warehouse which would cater between 20-25% of the needs of textile and clothing operators	**3**							Operators	Yarn bank set up	Private sector	Funding required
	2.1.2 Increase vertical integration business models in the sector	**3**							Operators	Business models set up	Private sector	Process to be put in place

APPENDIX D
PLAN OF ACTION

TEXTILE AND CLOTHING												
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
2.2 Introduction of financial schemes	2.2.1 Setting up of schemes that could allow enterprise more time in their repayment of loans/ to suppliers	**2**							Operators	Schemes set up	ISP Ltd	Either through MISF or by re-vamping the existing ISP financial schemes with commercial banks by providing additional guarantees + review DBM working capital loan scheme
	2.2.2. Establish schemes for enterprises to invest in new machineries (*proposed Manufacturing Investment Support Fund- MISF)*	**2**							Operators	Schemes set up	ISP Ltd	MISF (Rs. 4.4 billion up to 2025
	2.2.3 Create an open financial model encouraging private companies to focus investment on process, product, functional, and value chain upgrading opportunities (*proposed Manufacturing Upgrading Fund- MUF*)	**2**							Operators	Schemes set up	ISP Ltd	MUF (Rs. 1.9 billion over 5 years)
	2.2.4 Lowering of interest rates and banking fees for operators	**1**							Operators	Scheme operational	Banks	Funding required
	2.2.5 Institute a Material Efficiency Programme (in the form of a Matching Grant Scheme for high energy consumers).	**2**							Operators	Programme established	MRIC	MUF (Rs. 1.9 billion over 5 years)
2.3 Encourage sustainable production	2.3.1 Introduce a mechanism for clean renewable energy allowing firms to produce energy and to feed surplus to the grid	**2**							Operators	Mechanism introduced	MEPU	Process to be put in place
	2.3.2. Set up Carbon emission targets for industry compliance	**2**							Operators	Targets set up	MESWMCC	Process to be put in place
	2.3.3 Establish systems for recycling water in enterprises	**2**							Operators	System established	MESWMCC	Funding required
	2.3.4 Encourage use of alternative raw materials and more environmentally friendly chemicals and encourage symbiosis.	**2**							Operators	More environmentally products developed	MESWMCC	Process to be put in place
	2.3.5 Encourage research / exploring the possibility of recycling garment wastes and use these recycled products as alternative raw material	**2**							Operators	New recycled products developed	MESWMCC	Process to be put in place

APPENDIX D
PLAN OF ACTION

TEXTILE AND CLOTHING											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
2.4 Improve port services	2.4.1 Enhance productivity at the port of Mauritius to give a boost to the development of the sector This could include: i) Mauritius should be able to attract shipping lines by increasing the frequency of shipping schedules ii) Other measures such as an ultra modern harbour causing minimum delay in loading/unloading of containers, relevant incentives to shipping lines and operation of port on 24x7 basis could be implemented.	**2**							Port	Productivity enhanced	MPA	Resources required
2.5 Increase institutional support from government	2.5.1 Ensure coherence between operators and support institutions, for e.g. EDB, NPCC, ISP etc.	**1**							Operators& Institutions	Network established	MOIDSC	Process to be put in place
	2.5.2 Strengthen partnership between private and public sectors	**1**							Private & Public sector	Partnership enhanced	Government & Private sector	Process to be put in place
2.6 Improve quality of infrastructure	2.6.1 Ensure manufactured goods produced in factories comply with international norms (i) provide technical assistance to factories/personnel onsite on how to improve the quality (ii) training of personnel on quality consciousness (iii) encouraging exporting companies to EU and USA to comply with international standards namely BSCI, WRAP, ISO, amongst others.	**2**							Operators	No. of products conforming to norms	MSB	Process to be put in place & MUF
2.7 Enhance the image of the sector	2.7.1 Increase visibility of the sector through branding to encourage youngsters to join the sector	**2**							Operators	Visibility of sector enhanced	EDB	Process to be put in place
2.8 Encourage R &D in the sector	2.8.1 Set up of R&D programmes in the field of design, innovation and technology (Industry 4.0) to boost the sector	**2**							Operators	No. of programmes set up	MRIC	Technology Innovation Incentive (TII)/MUF
Strategic Objective 3: Improve support services and access to technology and innovation for the textile and clothing enterprises												
3.1 Focus on technology and innovation	3.1.1 Promote transfer of technology from countries leading in the sector, including technologies associated with Industry 4.0	**2**							Operators	Transfer initiated	EDB	MUF (Rs. 1.9 billion over 5 years)
	3.1.2 Encourage investment in wastewater plants	**2**							Operators	No. of new plants set up	MEPU	MUF (Rs. 1.9 billion over 5 years)
	3.1.3 Shortening the time taken to recruit high skilled experts for urgent maintenance of machines	**2**							Operators	Recruitment time shortened	MOLHRDT	Process to be put in place
	3.1.4 Displacement of workers from shrinking low productivity sub-sectors to expanding higher	**2**							Operators	Displacement effective	MOIDSC & HRDC	Study already proposed

APPENDIX D
PLAN OF ACTION

TEXTILE AND CLOTHING											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
	productivity sub-sectors such as digitalised services or high-fashion industry.											
Strategic objective 4: Develop markets and strengthen export promotion efforts												
4.1 Improve market access	4.1.1 Provision of incentives to encourage textile and clothing operators to sell locally	**2**							Operators& Consumers	Incentives introduced	MOFEPD	Process to be put in place
	4.1.2 Introduction of grants to set up e-commerce platforms	**2**							Operators	Grants introduced	MOFEPD	Funding required
	4.1.3 Enlarge market access to EU,USA, Africa, and new emerging markets such as Australasia.	**2**							Operators	Market access enlarged	EDB	Funding for market access
	4.1.4 Review PTAs with existing countries and embark on signing of new PTAs with emerging markets, e.g. Japan, Australia, Brazil and Canada.	**3**							Operators	No of PTAs reviewed and no. of new PTAs signed	MOFARIIT	Process to be put in place
	4.1.5 Improve connectivity with existing/new markets and address the high costs of freight	**2**							Operators	Connectivity improved	EDB	Process to be put in place
	4.1.6 Extension of Freight Rebate Scheme for exports to Africa and scheme extension to South Africa and Tamatave (applicable to end Dec. 2020) *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	EDB	Funding earmarked
	4.1.7. Extension of the Trade Promotion and Marketing Scheme for two years up to June 2022 for exports to Japan, Australia, Canada & the Middle East *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	EDB	Funding earmarked
	4.1.8 Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets and key developed economy markets to help SME's supply these markets	**2**							Operators	Warehousing and linkages established	EDB	Funding & Process to be established
4.2 Increase export promotion	4.2.1 Promote development of regional value chains for textile and clothing	**3**							Operators	RVCs promoted	EDB	Process to be put in place
	4.2.2 Government to explore the provision of discounted export credit guarantees to support risky market search activities in Sub-Saharan African markets	**2**							Operators	Scheme in place	EDB	Funding required

APPENDIX D
PLAN OF ACTION

FOOD PROCESSING & FISH PREPARATIONS SECTOR												
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high 2=med 3=low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
Strategic Objective 1: Enhancing the capacity of the sector												
1.1. Enhance production/supply of agro (including poultry, honey, mushrooms, etc.) & fish products	1.1.1. Develop the production of vegetables and fruits with suitable processing qualities	**1**							Entire value chain	% increase in production	MoAIFS& Cooperatives Division	Process to be put in place
	1.1.2. Ensure sustainable supply of fish by establishing a list of fish available in our EEZ with exploitable capacity	**1**							Entire value chain	% increase in availability of fish	MOBEMRFS	Process to be put in place
	1.1.3. Ensuring Food safety by modernising all legislations pertaining to food, including food safety, food standards, retail food locations, food testing, etc.	**1**							Entire value chain	Increase in food safety & No. of legislations established	MoAIFS	Process to be put in place
	1.1.4. Carry out risk assessment and sampling plan for honey from Rodrigues and communicate to EU Food and Veterinary Office (FVO)	**1**							Operators	Risk Assessment and Sampling plan completed	MoAIFS	Process to be put in place
	1.1.5. Promote recycling of waste (e.g. agro & fish waste) by exploring the possibility to attract potential investors.	**2**							Operators	No. of new investors & Amount of waste recycled	EDB & MOESWMCC	MUF (Rs1.9bn over 5 years) MISF (Rs 4.4 bn to 2025)
1.2. Ensure sustainability of tuna supply for processing	1.2.1. Mauritius to take advantage of its membership of the Indian Ocean Tuna Commission (IOTC), which co-ordinates fishing practices, quotas, stock assessments and to leverage on the possibility of influencing policy decision making in IOTC matters.	**1**							Industry	Tuna supply meets corresponding demand.	MOBEMRFS & MOFARIIT	Process to be put in place
1.3. Develop skills in the sector	1.3.1. Ensure a consistent supply of labour for the food preparations and fish preparations sector	**2**							Industry	% increase in labour supplied	MOLHRDT	Process to be put in place
	1.3.2. Encourage Industry-based training to bridge gap between academia and industry	**2**							Industry	No. of Industry-based training	MOLHRDT, HRDC, MITD, Polytechnics & Private sector	Process to be put in place
	1.3.3. Prioritise top level jobs and technical skills to address unavailability of skills in the sector	**2**							Industry	No. of new jobs created	MOLHRDT	Process to be put in place
	1.3.4. Set up schemes to retain qualified people in the sector	**2**							Industry	No. of qualified people retained	MOLHRDT & Private sector	Funding required

APPENDIX D
PLAN OF ACTION

FOOD PROCESSING & FISH PREPARATIONS SECTOR											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high **2=med** **3=low**	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
1.4. Enhance image building for the sector	1.4.1. Encourage youngsters to develop interest in manufacturing careers especially in food processing and fish preparation sector	**3**							Industry	No. of youngsters encouraged	MOLHRDT, HRDC& Private sector	Process to be put in place
1.5. Improve institutional support	1.5.1. Improve public–private coordination in the sector and among lead firms and SMEs.	**2**							Industry	Effective Coordination in place	MOIDSC	Process to be put in place
	1.5.2. Build capacity of support institutions (e.g. EDB) to effectively facilitate and target investment in the sector	**2**							Industry	% increase in investment from this activity	EDB	Process to be put in place
1.6. Develop appropriate infrastructure	1.6.1. Ensure land and buildings readily available to SMEs in the sector	**2**							Industry	Additional land and factory space provided	Landscope & DBM	Process to be put in place & Funding required
	1.6.2. Improve and enhance the current system in respect of disposal of waste	**3**							Operators	Waste disposal system improved	MOESWMCC	Process to be put in place & Funding required
	1.6.3. Set up cold storage facilities in strategic areas for processed frozen food including fish	**1**							Operators	Increased in cold storage facilities	MOBEMRFS & Private sector	Funding required
	1.6.4. Provide infrastructure in Mauritius and Rodrigues that can be HACCP-certified for all entrepreneurs (including women) involved in food production	**1**							Operators	No. of new certified entrepreneurs	MoAIFS	Funding required
	1.6.5. Set up a Meat Competent Authority + a HACCP certified slaughterhouse	**2**							Operators	Authority set up and slaughterhouse certified.	MoAIFS	Process to be put in place & Funding required
Strategic Objective 2: Upgrade technological capabilities and improve access to finance												
2.1. Foster Innovation in the sector	2.1.1. Set up schemes to support research, innovation, upgrading and modernisation as well as encouragement for young innovators to invest in the sector	**2**							Industry	No. of Schemes established	ISP Ltd	*MUF (Rs. 1.9 billion), MISF (*Rs. *4.4 billion*) & *TII (Incentive)*
2.2. Improve access to finance	2.2.1. Facilitate enterprises by providing preferential rates while subscribing for loans from bank	**2**							Operators	No. of enterprises assisted	ISP Ltd	Funding required
2.3. Promote investment in the sector	2.3.1. Increase targeted investment promotional activities in the sector	**2**							Industry	% increase in investment from this activity	EDB	Process to be put in place & Funding required
	2.3.2. Increase participation in international conferences on agro-based and seafood products to get up-to-date information on the sector and develop relevant strategies	**2**							Operators	% increase in seafood sector investment	EDB	Process to be put in place & Funding required

APPENDIX D
PLAN OF ACTION

FOOD PROCESSING & FISH PREPARATIONS SECTOR											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer(s)***	***Budget Impact***
		1=high **2=med** **3=low**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**				
2.4 Promote research and innovation in the sector.	2.4.1. Promote research and technical expertise to develop and create value added products from waste streams (*e.g. collagen extraction from "tuna waste" materials*).	**2**							Industry	No. of new products developed	MRIC & academia	Resources required
Strategic Objective 3: Improve export promotion and market diversification												
3.1. Improve market access	3.1.1. Improve knowledge of international niche market access requirements.	**2**							Industry	% increase in exports from this activity	EDB	Resources required
	3.1.2. Identify strategic niche markets according to range of products available for export	**3**							Industry	No. of new markets identified	EDB	Stakeholder engagement process
	3.1.3. Provide more incentives and support in market intelligence for penetrating into new markets	**2**							Industry	% increase in exports to new markets	EDB	Funding required
	3.1.4. Extend the Trade & Promotion Marketing Scheme to other markets for chilled fish	**2**							Operators	% increase in exports to new markets	EDB	Funding required
	3.1.5. Extend current Freight Rebate Scheme to other markets	**2**							Operators	% increase in sea freights to new markets	EDB	Funding required
3.2. Intensify exports	3.2.1. Intensify structured export promotion campaigns	**2**							Operators	% increase in exports	EDB	Process to be put in place & Funding required
	3.2.2. Support the sector (including aquaculture) to access SADC and AGOA under the preferential access schemes available	**3**							Operators	% increase in exports	MOFARIIT& EDB	Process to be put in place & Funding required
	3.2.3. Provide assistance to enterprises in reaching EU and US standards	**2**							Operators	% increase in exports from activity	SMEML & MSB	Process to be put in place

APPENDIX D
PLAN OF ACTION

MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)												
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**				
Strategic Objective 1: Develop an enabling legal and regulatory framework for the Medical Devices sector												
1.1. Establish a regulatory framework for the Medical Devices & Pharmaceutical industry in Mauritius	1.1.1 Proclamation of the Human Tissue Act. *(Budget 2020-2021)*	**1**							All stakeholders	Legislation enacted	MOH	Process to be put in place
	1.1.2. Introduction of a Medical Products Regulatory Authority Bill to ensure conformity with international norms and standards. *(Budget 2020-2021)*	**1**							All stakeholders	Legislation introduced	MOH	Process to be put in place
	1.1.3. Setting up of a regulatory framework for telemedicine platforms. *(Budget 2020-2021)*	**1**							All stakeholders	Framework created and no. of platform set up	MOH	Process to be put in place
1.2. Upgrade the National Quality Infrastructure (NQI)	1.2.1. Developing the expertise of MAURITAS to assess and accredit Certification Bodies conducting ISO 13485 audits in Mauritius.	**1**							MAURITAS, MSB& Operators	Capacity developed	MAURITAS	Funding earmarked
	1.2.2. Developing the expertise of MSB to conduct management system certification audits to ISO 13485.	**1**							MSB & Operators	Expertise developed	MSB	Funding earmarked
	1.2.3. Setting up of the calibration services for the medical devices sector at the MSB.	**1**							MSB & Operators	Capacity upgraded	MSB	Funding earmarked
	1.2.4. Establish a list of tests and analyses required by manufacturers and assess the feasibility of conducting such analysis locally	**1**							Operators and Laboratories	List established	MSB	Process to be put in place
	1.2.5. Undertake targeted capacity building activities for Mauritian laboratories staff focusing on the priorities identified above (1.2.4)	**2**							Laboratories	2 training sessions conducted per year	MSB	Funding required
Strategic Objective 2: Boosting the organisation of the sector and encouraging integration and collaboration												
2.1 Establish synergies with support industries to increase local input production	2.1.1. Carry out a study to determine supporting services for the sector and establish a central listing where core competencies and capabilities are referenced.	**2**							All stakeholders	List established and study completed	MOIDSC	Funding required
	2.1.2. Organise meetings to promote business relationships and establish networks between the sector and the supporting industries.	**1**							Operators	No. of meetings organised and impact of incentives	EDB	Stakeholder engagement process
	2.1.3. Explore the opportunity to develop sterilized medical devices packaging services for high-tech production locally, including design and printing	**1**							Operators	No. of new units set up	EDB & MOIDSC	Funding required
	2.1.4. Explore the opportunity to develop specialised packaging services for the sector	**1**							Operators & Packaging industries	New packaging enterprises	EDB & MOIDSC	Funding required

APPENDIX D
PLAN OF ACTION

MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)												
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
2.2. Improve the institutional coordination and develop institutional capabilities	2.2.1. Undertake an assessment of the various institutional support, as well as gauge the extent and quality of their support to the sector	**1**							Operators	Assessment completed	MOIDSC	Funding required
	2.2.2. Conduct capacity building activities to improve the understanding and awareness of the institutions identified above (2.3.1)	**1**							Operators	Better understanding of institutions	MOIDSC	Funding required
Strategic Objective 3: Develop appropriate skills and competencies and foster research and innovation												
3.1. Align the education infrastructure with the requirements of industry and fix the STEM base with manufacturing requirements	3.1.1. Organise meetings between the industry and academia representatives to consolidate industry-research & academia linkages and improve communication	**1**							Industry and Academia	No. of meetings organised	MOIDSC	Stakeholder engagement process
	3.1.2. Develop and incorporate specific training courses on the sector as an option as part of an industrial management curriculum to raise awareness and promote the sector (in the short term)	**2**							Industry and Academia	Training courses developed	Universities	Process to be put in place
	3.1.3. Develop a dedicated curriculum for the sector in the medium-long term (to include Bio-Medical Engineering, Automation, Industrial processing, etc.). (see Recommendation 1.1.1 under Industry foundations)	**2**							Industry and Academia	New curriculums developed	Universities	Process to be put in place
	3.1.4. Work towards translating solicited industry needs into academic offerings, including research programmes in the medium to longer term	**2**							Industry and Academia	Academic offerings developed	Universities	Process to be put in place
	3.1.5. Provide universities with advanced equipment specific to the medical devices industry to allow them acquire theoretical and hands-on practical training on those equipment	**2**							Industry and Academia	Equipment purchased and fully operational	Universities	Funding required
	3.1.6. Develop internship programmes for students/ researchers under the various schemes. Develop and communicate locally on medical device sector to boost interest of skilled youngs or unemployed persons to join the sector.	**2**							Industry and Academia	Programmes developed	Universities	Funding required
	3.1.7. Develop linkages between Mauritian universities and specialized universities abroad	**2**							Industry and Academia	Linkages established	Universities	Process to be put in place
3.2. Boost research and innovation in the medical devices sector	3.2.1. Revisit existing programmes and mechanisms to promote R&D activities in the sector. (see R&D scheme proposed by Consultant)	**2**							Industry and Academia	Programmes revisited	MRIC	MUF (Rs. 1.9 billion over 5 years)

APPENDIX D
PLAN OF ACTION

MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
	3.2.2. Develop backward and forward linkages with universities and research institutes to elaborate specific R&D programmes targeting different segments of the sector's value chain	**2**							Research Institutes, Universities & Operators	Programmes developed and operational	MRIC	Process to be put in place
	3.2.3. Establish a system of incentives, such as use of SCR funds or a research tax credit to encourage the involvement of the private sector in funding R&D	**2**							Operators	Incentives established	MRIC	Process to be put in place
	3.2.4. Advocate for the enactment of the pending Pre-Clinical Research Bill that will provide the regulatory framework for pre-clinical trials (on monkeys)	**1**							Operators	Bill enacted	MOAIFS	Process to be put in place
3.3. Ensure the appropriate level of IP protection	3.3.1. Advocate for the signature of the Patent Convention Treaty (PCT) under WIPO, as envisaged under The Patent, Industrial Designs and Trademarks Act 2002, to guarantee the necessary IP protection	**1**							Government and Industry	Mauritius signatory of the PCT	ITD	Process ongoing
	3.3.2. Advocate for the inclusion of Mauritius in the Madrid Union, i.e. as a contracting party to the Madrid Agreement and the Madrid Protocol concerning the international registration of marks	**2**							Government and Industry	Mauritius party to the Madrid System	ITD	Process to be put in place
	3.3.3. Advocate for the inclusion of Mauritius in The Hague System, the International Design System, for the international Registration of Industrial Designs	**3**							Government and Industry	Accession of Mauritius to the Hague System	ITD	Process to be put in place
Strategic Objective 4: Provide a more enabling business environment for the development of the sector to facilitate FDI												
4.1. Facilitate the procedures for the import of inputs	4.1.1. Facilitate customs clearance procedures through the elaboration of a comprehensive updated list of imported inputs for the sector for inclusion in the MRA documentation	**1**							Operators/Institutions	Sensitisation completed	MRA	Process to be put in place
4.2. Create a more enabling business environment	4.2.1. Simplify compliance check procedures for industrial equipment and facilities as provided by the Health and Safety regulations (under the Ministry of Labour) and consider reducing the frequency of the controls	**2**							Operators	Regulations simplified	MOLHRDT	Process to be put in place
4.3. Provide a package of incentives to boost the sector	4.3.1. Introduction of a double deduction on costs incurred to comply with international quality standards and norms. *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MRA	Process to be put in place

APPENDIX D
PLAN OF ACTION

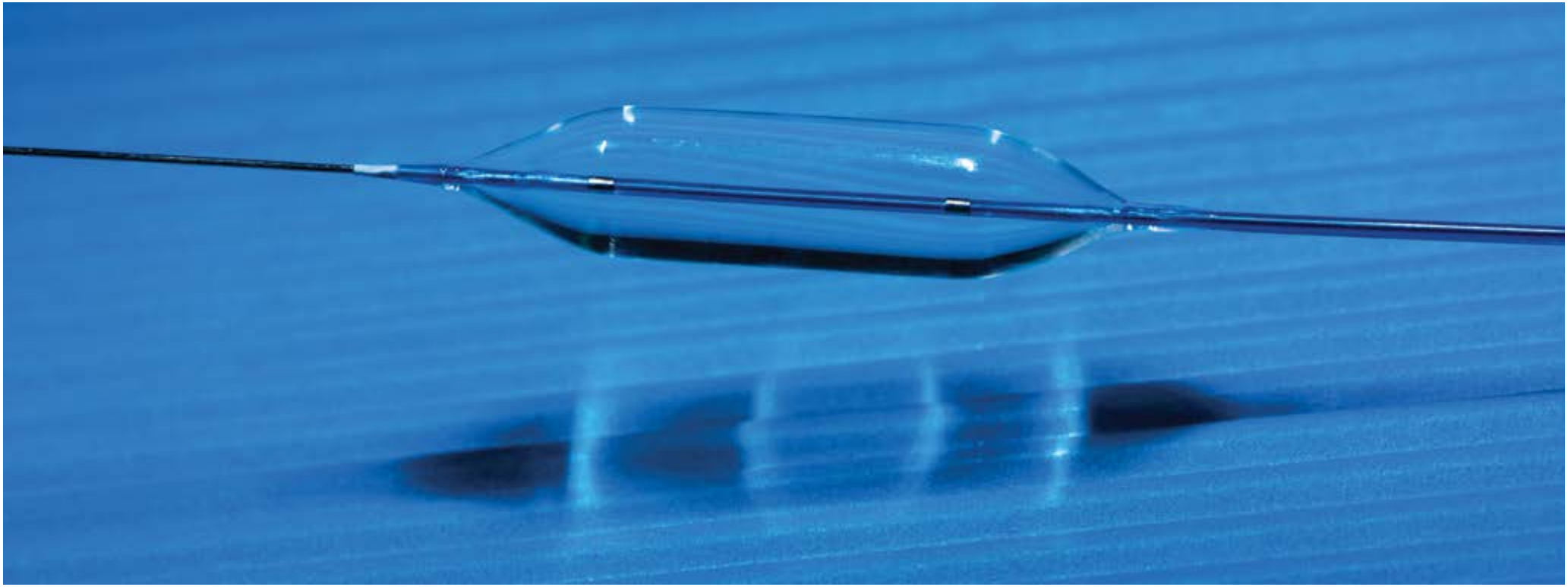
MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**				
	4.3.2. Refund of 50% on costs of certification, testing and accreditation of local laboratories. *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MOFEPD	Funding required
	4.3.3. Extension of the Investment tax credit of 15% over 3 years in the medical devices sector. *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MRA	Process to be put in place
	4.3.4. Introduction of a double deduction on the cost of acquisition of patents and franchises (*Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MRA	Process to be put in place
	4.3.5. Exemption from payment of registration duty and land transfer tax for the purchase of immovable property *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MRA	Process to be put in place
	4.3.6. Provision of a 8-year income tax holiday grant to a medical device company which has started or starts its operation on or after 8th June 2017 *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MRA	Process to be put in place
	4.3.7. Extension of Freight Rebate Scheme for exports to Africa and scheme extension to South Africa and Tamatave (applicable to end Dec. 2020) *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	EDB	Funding earmarked
	4.3.8. Extension of the Export Credit Insurance Scheme to cover all exports *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	EDB	Funding earmarked
	4.3.9. Extension of the Trade Promotion and Marketing Scheme for two years up to June 2022 for exports to Japan, Australia, Canada & the Middle East *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	EDB	Funding earmarked
	4.3.10. Waiving of Port dues and terminal handling charges for exports from July to December 2020 and reduction of 50% from January to June 2021*(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	MPA	Process to be put in place
	4.3.11. Provision of technically driven services to carry out research and assist in developing medical devices and pharmaceutical products at the future Health and Wellness Centre, Côte d'Or Data Technology Park *(Budget 2020-21)*	**2**							Operators and Research Institutes	Research activities initiated & No. of products developed	Landscope & EDB	Funding required
	4.3.12. Provision of Freight rebate on imports	**2**							Operators	Scheme operational	MOFEPD & MRA	Funding required
	4.3.13. Sector to benefit from higher HRDC refunds (Training and Consultancy) -Develop HRDC schemes to support local training of staff.	**2**							Industry	Scheme operational	HRDC	Funding required

APPENDIX D
PLAN OF ACTION

MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
	4.3.14. Introduction of a zero-income tax scheme for a period of 10 years dedicated to highly skilled expatriates and experienced researchers working in STEM R& D facilities *(see TII)*	**2**							Industry	No of beneficiaries	HRDC&MRA	Income tax forgone
4.4. Improve access to finance in the sector	4.4.1. To pursue awareness and education workshops for bank officers to identify the potential of the sector	**1**							Industry	Awareness campaign conducted	MOIDSC	Stakeholder engagement process
4.5. Redynamising investment in the sector	4.5.1 Provision of financial support by ISP to enterprises manufacturing medical devices *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	ISP Ltd	Funding required
	4.5.2 Setting of the Mauritius Investment Corporation Ltd (MIC) to invest in the production of medical devices and personal protective equipment through a public-private enterprise. *(Budget 2020-21)*	**1**							Operators	No. of beneficiaries	BOM	Funding required
	4.5.3. Conduct a comprehensive review of the current investment promotion activities relevant to the sector in place in Mauritius	**1**							EDB & Industry	Review completed	EDB & MOIDSP	Process to be put in place
	4.5.4. Improve institutional communication with prospective foreign direct investors, create awareness of Mauritian opportunities and ensure high realisation rate of projects	**1**							EDB & Industry	Communication strategy established	EDB	Process ongoing
Strategic Objective 5: Develop markets and strengthen export promotion efforts												
5.1. Improve market entry conditions, both locally and internationally	5.1.1. Advocate a reduction/elimination of customs duties applied to HS 9018 products on exports to BRIC countries	**1**							Operators	Duties reduced	MOIDSC & Private sector	Process to be put in place
	5.1.2 Accelerate signing of CECPA with India.	**1**							Industry	FTA signed by 2022	MOFARIIT	Process to be put in place
	5.1.3. Follow up on number of enterprises benefitting from Margin of Preference for products made in Mauritius for the local market	**1**							Operators	Scheme operational	PPO	Process to be put in place
	5.1.4. Conduct a study to explore opportunities for specific value chains in the medical devices sector.	**2**							Industry	No. of value chains developed	MOIDSC & EDB	Process to be put in place
	5.1.5. Enlarge market access to EU,USA, Africa, and new emerging markets such as Australasia.	**2**							Operators	% increase in exports	EDB	Funding required
	5.1.6. Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets and key developed economy markets to help SME's supply these markets	**2**							Operators	Warehousing and linkages established	EDB	Funding & Process to be established

APPENDIX D
PLAN OF ACTION

MEDICAL DEVICES, PHARMACEUTICALS AND MEDICAL PRODUCTS (MDPM)											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead Implementer(s)***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
5.2. Ensure structured export development and promotion efforts	5.2.1 Encourage information sharing amongst manufacturers and ensure coordinated approach for export promotion for the sector	**1**							Operators	Information disseminated	EDB	Process to be put in place
	5.2.2 Elaborate a new sector export promotion strategy	**1**							Operators	Strategy established	EDB	Process to be put in place
	5.2.3. Advocate a dedicated budget to foster manufacturer participation in international trade fairs to meet global buyers and promote the local industry	**1**							Operators	No. of enterprises participated in trade fairs	EDB	Funding required



APPENDIX D
PLAN OF ACTION

APPENDIX D
PLAN OF ACTION

JEWELLERY											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPIs***	***Lead Implementer***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
Strategic objective 1: Develop adequate human capital in line with industry and market needs												
1.1. Upgrade provision of training in Jewellery	1.1.1. Modernise the Jewellery Unit of the FDI to better respond to industry needs for a high-fashion jewellery sector by synergising with operators	**1**							FDI & Operators	No. of students trained & New Jewellers	FDI	Funding required
	1.1.2. Develop partnerships between the Jewellery Unit of the FDI and renowned international jewellery schools (UK, France and India) for exchange of students and teachers, transfer of knowledge and technology, improving teaching standards and qualifications, training of high-skilled Jewellers and scholarships.	**2**							FDI	No. of exchange programmes conducted & No. of new high-skilled jewellers trained	FDI	Process to be put in place
	1.1.3. Provision of dedicated training programmes/courses to ensure adequate supply of skillled labour for domestic enterprises (including SMEs) and export enterprises	**1**							FDI& Operators	No. Programmes / courses developed	FDI	Funding required
1.2. Enhance quality and quantity of training at enterprise-level	1.2.1. Review eligibility criteria of schemes offered by HRDC in the jewellery sector	**1**							Operators	Criteria reviewed &% increase in beneficiaries	HRDC	Process to be put in place
	1.2.2. Develop appropriate scheme/s to promote technical and vocational training to new market needs	**3**							FDI & Operators	Schemes established	FDI	Funding required
	1.2.3. Review incentives being offered to encourage training to enterprise to train their workers for specific tasks (e.g. polishing)	**2**							Operators	No. of workers trained	HRDC	Process to be put in place
1.3. Facilitate supply of skilled labour	1.3.1. Continue to classify jewellery as a scarcity area	**1**							Operators	Increase Flexibility	MOLHRDT	Process to be put in place
	1.3.2. Continue to fast-track the issue of work permits for expatriates in the jewellery sector	**1**							Operators	Eliminate delays in production	MOLHRDT	Process to be put in place
Strategic Objective 2: Improve support services and access to technology and innovation for jewellery enterprises												
2.1. Support development of the sector	2.1.1. Conduct an assessment of the jewellery sector and its related support activities covering its strengths and weaknesses	**1**							Industry	Study completed	MOIDSC	Funding required
2.2. Improve communication and coordination within the sector	2.2.1. The Jewellery Advisory Council to continue its role of advising the Minister in promotion of the jewellery sector, including issues relating to investment, skills development and innovation	**2**							All stakeholders	Coordination increased	MOIDSC	Process already in place
	2.2.2. Organise regular meetings with jewellery stakeholders including Federation of Jewellers to	**1**							All stakeholders	Meetings organised regularly	MOIDSC	Process to be put in place

APPENDIX D
PLAN OF ACTION

JEWELLERY											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPIs***	***Lead Implementer***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
	synergise, assess status of the sector and plan new activities											
2.3. Promote investment for jewellery and support industries	2.3.1. Review the incentive framework provided by the Government for domestic enterprises and export oriented- enterprises to foster start-ups, modernisation and investment and world class operations (*see Modernisation Investment Support Fund-MISF*)	**1**							Government	% of enterprises upgrading their technology	ISP Ltd	MISF (Rs 4.4 billion till 2025
	2.3.2. Conduct targeted investment promotion campaigns to promote foreign and domestic investment in specific jewellery manufacturing and related activities	**2**							Government	% increase of investment in sector	EDB	Funding required
2.4. Promote diversification of the sector	2.4.1. Exploring the possibility of allowing importation of semi-finished products for exports.	**2**							Operators	% increase in imports	MOFEPD	Process to be put in place
2.5. Develop a jewellery cluster	2.5.1. Facilitate the establishment of a Common Facility Centre (CFC) for jewellery and support industries	**2**							Government and Operators	CFC established	EDB/MOIDSC SMEML	Funding required
	2.5.2. Provide common facilities for Jewellers in Design, 3D printing and Casting. (This activity will be possible only when skilled technicians are available locally or from abroad)	**2**							Operators	No. of beneficiaries	FDI	Funding required
2.6. Improve access to finance	2.6.1. Introduce tax incentives, R&D loans and grants to access and upgrade technology	**1**							Operators	Schemes set up	ISP Ltd	Proposed MUF (Rs 1.9 billion over 5 years)
	2.6.2. Provide funding/loans to existing and new enterprises (incubators and start-ups) at concessionary rates and review requirements for collaterals.	**2**							Operators	Scheme set up	ISP Ltd	
	2.6.3. Review the VAT threshold from Rs.6 million to Rs.10 million for jewellery enterprises	**1**							Jewellery manufacturers	VAT threshold reviewed	MRA/MOFEPD	Funding required
Strategic Objective 3: Strengthen visibility and recognition of Mauritian jewellery on international markets												
3.1. Improve product design	3.1.1. Enhance capacity building in product design and development focusing on trends in Oriental, European and other types of jewellery as well as integrating the local culture.	**1**							Operators	24 students trained annually	FDI/ EDB	Funding required

APPENDIX D
PLAN OF ACTION

JEWELLERY											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPIs***	***Lead Implementer***	***Budget Impact***
		1=high 2= med 3= low	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
3.2. Improve delivery times	3.2.1. Maintain the existing Trade Promotion and Marketing Scheme in Africa, Australia, Canada, Europe, Japan, Middle East and USA until June 2022. for exporters of jewellery i). Envisage the possibility of extending scheme to Vietnam ii). Include polished diamonds in the list of eligible products	**2**							Operators	% increase in exports	EDB	Funding earmarked
3.3. Re-dynamise export promotion programmes	3.3.1. Conduct well planned export promotion programmes in strategic target markets including existing, new and emerging markets	**1**							Operators	% resulting increases in exports	EDB	Funding required
	3.3.2. Encourage the development of export-ready enterprises	**2**							Operators	No. of new export-ready companies	EDB	Process to be put in place
	3.3.3. Reduce overall cost of issuing ATA Carnets to operators by (a) reducing the % of value for security deposit for jewellery operators; or (b) establishing a collective funding mechanism according to best practice	**2**							Operators	% increase in exports	EDB & MCCI	Funding required
3.4. Leverage branding for better product positioning	3.4.1. Explore the possibility of creating a collective jewellery brand based on Mauritian identity, authenticity, quality and know-how.	**3**							Operators	Brand created	EDB	Funding required
	3.4.2. Set up the appropriate Intellectual Property framework for the sector	**2**							Operators	No. of brands protected under the IP law.	ITD	Process to be put in place
3.5. Increase compliance with standards	3.5.1. Harmonise national product standards and certifications with those of strategic target markets (including adoption of such related ISO by MSB)	**2**							Operators	Standards aligned	MSB	Process to be put in place
3.6. Support product diversification	3.6.1. Conduct R&D, test and trials for products from sea (e.g. pearls, seashells) to diversify products range.	**3**							Operators	No. of new export products & % increase in exports	Academia	Funding required
	3.6.2. Promote sourcing other precious stones from Africa (e.g. tanzanite) to diversify product offerings	**3**							Operators	No. of new export products & % increase in exports	EDB	Funding required
	3.6.3. Conduct a feasibility study on the diversification opportunities in jewellery and associated products (e.g. Home decor accessories, Fine fancy jewellery, Imitation jewellery and figurines) (could be merged with activity 2.1.1 assessment…)	**2**							Operators	No. of new export products & % increase in exports	EDB	Funding required

APPENDIX D
PLAN OF ACTION

Cross-sectoral Recommendations relevant to the Manufacturing SMEs												
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer***	***Budget Impact***
		1=high										
		2= med	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
		3= low										
Strategic Objective 1: Develop adequate human capital in line with industry and market needs												
1.1. Ensure that STEM and academic triangle support manufacturing sector.	1.1.1 Establish a manufacturing sector skills development roadmap by (i) addressing basic and intermediate technical education to raise level of STEM capabilities; (ii) setting up a post graduate technical institution in Mauritius by providing the industry with a pipeline of advanced skills; and (iii) opening technically oriented career opportunities for secondary school leavers and tertiary graduates (refer to Recommendation No.1 in the IPSP Report).	**2**							Industry	Roadmap developed, no.of students trained in STEM subjects and employed in manufacturing	HRDC & MOIDSC	Funding for roadmap
1.2. Upgrade public vocational training in Jewellery	1.2.1. Provision of training courses to SMEs to better adopt technology in their working processes (refer to recommendation 1.1.2 in Jewellery matrix)	**2**							Operators/SMEs	No. of SMEs trained	FDI	Funding required
1.3. Enhance quality and quantity of training at enterprise-level in Jewellery	1.3.1. Develop appropriate programmes/courses (to foster to technical and vocational training) ensure adequate supply of skilled labour for local industry as well as export enterprises (refer to recommendation 1.2.2 in Jewellery matrix)	**1**							FDI& Operators	No. of people trained	FDI	Funding required
	1.3.2. Review incentives being offered to encourage training in the Jewellery sector (refer to recommendation 1.2.3 In Jewellery matrix)	**2**							Operators	More jewellers to benefit from schemes	HRDC	Funding required
1.4. Develop skills in the food processing and fish preparations sector	1.4.1. Ensure a consistent supply of labour for the food processing and fish preparations sector (refer to recommendation 1.3.1 in Food Processing and Fish Preparations matrix)	**2**							Industry	% increase in labour supplied	MOLHRDT	Stakeholder engagement process
	1.4.2. Encourage Industry-based training to bridge gap between academia and industry in food processing and fish preparations sector (refer to recommendation 1.3.2 in	**2**							Industry	No. of Industry-based training	MOLHRDT & Private sector	Process to be put in place

APPENDIX D
PLAN OF ACTION

Cross-sectoral Recommendations relevant to the Manufacturing SMEs											
Intervention Areas	***Instruments***	***Priority*** 1=high 2= med 3= low	***Implementation period*** 2020	2021	2022	2023	2024	2025	***Beneficiaries***	***KPI***	***Lead implementer***	***Budget Impact***
	Food Processing and Fish Preparations matrix)											
1.5. Enhance image building for the sector	1.5.1. Encourage youngsters to develop interest in manufacturing careers especially in food processing and fish preparation sector (refer to recommendation 1.4.1 in Food Processing and Fish Preparations matrix)	**3**							Industry	No. of youngsters encouraged	MOLHRDT & Private sector	Stakeholder engagement process
Strategic Objective 2: Provide adequate infrastructure for the manufacturing sector, including SMEs												
2.1. Develop appropriate infrastructure	2.1.1. Ensure land and buildings readily available for operators in the sector	**2**							Operators	Additional land and factory space provided	EDB & Landscope	Stakeholder engagement process
	2.1.2 Improve and enhance the current system in respect of disposal of industrial waste including fish waste (refer to recommendation 1.6.2 in Food Processing and Fish Preparation matrix)	**3**							Operators	Waste disposal system improved	MOESWMCC	Funding required
2.2 Develop a jewellery cluster	2.2.1. Facilitate the establishment of a Common Facility Centre (CFC) for jewellery and support industries (refer to recommendation 2.5.1 In Jewellery matrix)	**2**							Government and Operators	CFC established	EDB/MOIDSC/SMEML	Funding required
Strategic Objective 3: Upgrade technological capabilities and develop new products												
3.1. Foster Innovation in the sector	3.1.1. Creation of Modernisation Investment Support Fund to support research, innovation, upgrading and modernisation as well as encourage youngsters to develop innovative projects in the manufacturing sector (including Food, Jewellery, etc…) (refer to Recommendation No. 9 in the IPSP Report)	**2**							Industry	Schemes established	ISP Ltd	MISF (Rs. 4.4 billion for five years)

APPENDIX D
PLAN OF ACTION

Cross-sectoral Recommendations relevant to the Manufacturing SMEs											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer***	***Budget Impact***
		1=high										
		2= med	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
		3= low										
3.2. Increase production Food and FMCG products	3.2.1. Encourage enterprises to tap the domestic market manufacturing opportunities relating to food processing, FMCG, relevant to food security and basic necessities, especially in the wake of Covid-19 (refer to Section 4.3 Optimising Local Production for the domestic market in the IPSP Report)	**1**							Operators	No. of new enterprises entering the domestic market	MOIDSC (incl. SME & Coop Div.)	Process to be put in place
3.3. Improve institutional support	3.3.1. Improve public–private coordination in the sector and among lead firms and SMEs. (refer to recommendation 1.5.1 in Food Processing and Fish Preparation matrix)	**2**							Industry	Effective coordination in place	MOIDSC	Stakeholder engagement process
	3.3.2. Build capacity of support institutions (e.g. EDB, SMEML) to effectively facilitate and target investment in the sector (refer to recommendation 1.5.2 in Food Processing and Fish Preparation matrix)	**2**							Industry	% increase in investment from this activity	SMEML	Stakeholder engagement process
	3.3.3 Improve collection of data for SMEs (Refer to Section 1.2.3 in the IPSP Report)	**2**							Industry	Collection of data enhanced	Statistics Mauritius	Process to be put in place
Strategic Objective 4: Improving Access to Finance												
4.1 Product and process diversification and shift to higher value added production	4.1.1. Creation of a Manufacturing Upgrading Fund (refer to recommendation No. 8 in the IPSP Report)	**1**							Operators	Schemes set up	ISP Ltd	Proposed MUF (Rs 1.9 billion over 5 years)
4.2 Technology Upgrading	4.1.1. Creation of a Modernisation Investment Support Fund (see 3.1.1 above)	**2**							Operators	Scheme set up	ISP Ltd	MISF (Rs. 4.4 billion for five years)
4.3 Increase R&D activity	4.3.1. Setting up a Technology Innovation Incentive (refer to recommendation No.10 in the IPSP Report)	**2**							Operators	Schemes set up	MOFEPD	Incentive
Strategic Objective 5: Improving Marketing and Regional Exports Capacity												
5.1. Enhance SME Export Capacities	5.1.1. Negotiate expanded market access to key countries, including Africa, EU, USA and new emerging markets such as Australasia.	**2**							Operators	Market access enlarged	EDB	Funding for market access

APPENDIX D
PLAN OF ACTION

Cross-sectoral Recommendations relevant to the Manufacturing SMEs											
Intervention Areas	***Instruments***	***Priority***	***Implementation period***						***Beneficiaries***	***KPI***	***Lead implementer***	***Budget Impact***
		1=high										
		2= med	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***				
		3= low										
	(refer to Recommendation No. 20 in IPSP report)											
	5.1.2 Explore the establishment of cost-effective warehousing and direct freight linkages to targeted African markets and key developed economy markets to help SME's supply these markets (refer to Regional and Global export recommendation 21 in the IPSP report)	**2**							Operators	Warehousing and linkages established	EDB	Funding & Process to be established
	5.1.3 Explore regional opportunities of targeted products- for e.g, textile, food, jewellery and other products. (refer to Regional export recommendation 19 in the IPSP report and Appendix B)	**2**							SMEs	Exports in the region increased	EDB	Process to be put in place
	5.1.4. Conduct well planned export promotion programmes in strategic target markets including existing, new and emerging markets (refer to Recommendation 3.3.1 in Jewellery Matrix)	**1**							Operators	% resulting increases in exports	EDB	Funding required

APPENDIX E

LIST OF STAKEHOLDERS AND PARTICIPANTS

APPENDIX E
LIST OF STAKEHOLDERS AND PARTICIPANTS

List of stakeholders interviewed and enterprises visited

Organisation	Representative	Designation
Ministries		
Ministry of Industrial Development, SMEs and Cooperatives (Industrial Development Division)	Mrs. B. F. Abdool Raman-Ahmed	Permanent Secretary
	A. Paul	Director of Industry
	B. R. Domun	Principal Analyst (Industry)
	R. Sungkur	Principal Analyst (Industry)
	B. Soondur	Ag. Principal Analyst (Industry)
	R. Bharosay	Senior Analyst (Industry)
	S. Carrim	Senior Analyst (Industry)
	K. Manna	Senior Analyst (Industry)
	B. Ramdoyal	Senior Analyst (Industry)
	Z. Mandarun	Ag. Senior Analyst (Industry)
	H. Seeboruth	Analyst (Industry)
	B. Seedoyal	Analyst (Industry)
	B. Moothoosamy	Head, Business Information Unit
	Y. Cader	Assistant to Head, Business Information Unit
Ministry of Industrial Development, SMEs and Cooperatives (SME Division)	D. Conhye	Deputy Permanent Secretary
	V. Veeramah	Business and Enterprise Analyst
	T. Ramnarain	Business and Enterprise Analyst
	B. Bhundoo	Business and Enterprise Analyst
Ministry of Industrial Development, SMEs and Cooperatives (Cooperatives Division)	Mrs. S. Ponien-Vencatachellum	Cooperative Development Officer
Ministry of Finance, Economic Planning and Development	P.Rojoa	Lead Analyst
	D. Mathoora	Analyst/Senior Analyst
	R. Goolamamode	Analyst/Senior Analyst
Public sector agencies		
MAURITAS	Robin Neeren Gopee	Director
Assay Office	Ajay Somanah	Director
	Y. Lucknauth	Asst. Director
Mauritius Standards Bureau	Rashida Nanhuck	Acting Director
	M.Y. Foondun	Head of Quality Assurance Unit
Fashion & Design Institute	Pushpanjali Luchoo	Officer-in-Charge
Landscope Mauritius	N. Hanoomanjee	CEO
Investment Support Programme	Suryadev Beedasy	COO
MITD (Mauritius Institute of Training and Development)	Pradeep Kumar Joosery	Director
Economic Development Board	Geerish Bucktowonsing	Head: Manufacturing (Traditional Industries)
	Nirmala Jeetah	Head: Manufacturing (New Industries)
	Shakeel Jaulim	Lead Professional
	Sanroy Seechurn	Manager
	Randhir Guirdharry	Senior Professional
Human Resource Development Council	Sharma Seechurn	Research & Development Coordinator
SME Mauritius	Ravin Rampersad	CEO
	Michael Pompeia	Head – Strategy & Communication
Mauritius Research and Innovation Council (MRIC)	Poonam Veer Ramjeawon	Research Coordinator
Statistics Mauritius	D. Bahadoor	Deputy Director
NPCC	Dev Appalswamy	Officer in Charge
	Hemlata Ramsohok	Lead Research & Knowledge Management

APPENDIX E
LIST OF STAKEHOLDERS AND PARTICIPANTS

List of stakeholders interviewed and enterprises visited

Organisation	Representative	Designation
Private sector agencies		
Business Mauritius	Kevin Ramkaloan	CEO
	Daden Venkatasawmy	Head: Collaborative Economic Development
MCCI (Mauritius Chamber of Commerce and Industry)	Anjana Khemraz-Chikhuri	Deputy Registrar of MARC
	Sylvan Oxenham	President
MEXA (Mauritius Export Association)	Lilowtee Rajmun-Jooseery	Director
Association of Mauritian Manufacturers	Yannis Fayd'Herbe	President
	Bruno Dubarry	Chief Executive Officer
Firms		
Archemics Ltd	Olivier Maujean	GM Operations
	Yannick Doger De Speville	Business Development
	Jean Marc Juhel	GM Distribution
Aremo Ltd	Philip Götze	Director
Junga Ltd	David Marais	Director
Rhumerie de Chamarel	Herbert Couacaud	Director
Moroil (Mauritius Oil Refineries Ltd)	André Espitalier Noël	MD
	Ravish Musruck	Process Manager
	Rehaz Sayed Hassen	Finance Manager
Natec Medical Ltd	Stefan LeFevre	COO
	Yoel Attias	CFO
FMM (Ferme Marine De Mahebourg)	Pierre-Yves Semaesse	CAO
Mopirove Ltd	Abhishek Cheekhooree	Operations Director
	Sunjay M. Cheekhooree	Chairman & MD
Banker Shoes	Perumal Sinnappan	Director
Ferney Spinning Mills	Mohammad Reshad Moosun	Operations Manager
	Khalid Hansrod	Marketing Executive
T&T International Foods	Ian Fook	Director
Oxenham	Sylvan Oxenham	CFO
Plaspak Group	Mounesh Mareachealee	Executive Chairman
Plastic Industry Ltd	Eric Corson	MD
Princes Tuna	Abdulla Doomun	Managing Director
RT Knits	Kendall Tang	CEO
Vygon (Lilmo Ltd)	Georges Wong	Plant Manager

APPENDIX E
LIST OF STAKEHOLDERS AND PARTICIPANTS

List of Participants in Consultative Workshop held on 27 February 2020

Ministry/Organisation/Company	Name	Designation
Assay Office	Mr. Ajay SOMANAH	Director
Association of Mauritian Manufacturers	Mr. Bruno Dubarry	Chief Executive Officer
Bioculture (Mtius) Ltd	Mr Jacob Griffiths	Business Development Manager
Business Mauritius	Mr Daden Venkatasawmy	Head, Collaborative Economic Development
CIEL Textiles/Tropic Knits	Mr. Jean Christophe Lan Hoo Wah	Marketing Manager
Development Bank of Mauritius Ltd	Mrs Deviani Ganowry	Senior Development Officer
Economic Development Board	Mrs. Nirmala Jeetah	Head - Manufacturing New Industries
	Mr. Geerish Bucktowonsing	Head of Department, Manufacturing (Traditional Sectors)
	Mr Keerenparsad Bhogun	Lead Professional
	Mr Kavi Boojhawon	Lead Professional
	Mr Ram Jutliah	Manager
English Bay	Mr. Mike Webb	Managing Director
Esquel (Mauritius) Ltd	Nash	Associate Director, Finance & Logistics
Fashion & Design Institute	Ms Pushpanjali Luchoo	Officer in charge
Fashion & Design Institute	Mr S. Daby	Project Executive
FCI SUD LTD	Ms Varoonah Devi FULLEE	Production Manager
Federation of Jewellers	Mr. Deotam SANTOKEE	President/ Vice President
Ferme Marine de Mahebourg	Mr Thibault de Navacelle	Marketing Manager
Goldfinger Jewels	Mr. Kailash Ramkhalawon	Managing Director
Human Resource Development Council (HRDC)	Dr. Tehjal Vaghjee Rajiah	Senior Research & Development Officer
Human Resource Development Council (HRDC)	Mr Vilesh Seebaruth	Research Development Officer
Integrity Metal Works Ltd	Mrs Couronne	Director
Investment Support Programme Ltd (ISP)	Mr. Suryadev Beedasy	Chief Operation Officer
Landscope (Mauritius) Ltd	Mr Jack K. Seedoo	Assistant Manager
Laurelton Diamonds (Mauritius) Ltd	Mr. Selven Rungasamy	Plant Director
Lilmo Ltd	Mr Georges Wong	Director
M.I.T.D	Mr. Dwarkanata Sharma TEEMUL	Training Officer
Maman Saluja Ltee	Mrs. Shameera Cooshna	Director
Mauritius Accreditation Service (MAURITAS)	Mr. Robin Gopee	Director, Mauritas
Mauritius Chamber of Commerce and Industry (MCCI)	Mrs Anjana Khemraz	
Mauritius Export Association	Mrs Lilowtee Rajmun-Joosery	Director
	Mrs Jessica Appadu	Economics & Trade Coordinator
Mauritius Oil Refineries Limited	Mr. Andre Espitalier Noel	Managing Director
Mauritius Research & Innovation Council (MRIC)	Mrs Poonam VEER RAMJEAWON	Research Coordinator
Mauritius Standards Bureau	Mrs R. Nanhuck	Ag. Director
MCS Printing & Manufacturing Ltd	Mr Matikola Nandkumar	Director
Mer Des Mascareignes Ltee	Mr Eric Tavian	General Manager
Ministry of Energy & Public Utilities	Mr. Kamlesh Rughoonath	Senior Strategic Policy & Planning Officer
Ministry of Environment, Solid Waste Management & Climate Change	Mr S. Soobron	Director
	Mrs Doolaree Boodhun	Divisional Environment Officer
	Mrs A. Armoogum	Project Officer/Senior Project Officer
Ministry of Finance, Economic Development & Planning	Mrs. Parween Rojoa	Lead Analyst
Ministry of Foreign Affairs, Regional Integration and International Trade	Mr Sachin Dev Khundoo	Principal Analyst
Ministry of Foreign Affairs, Regional Integration and International Trade (International Trade Division)	Mrs. H. Domun- Saddul	Trade Policy Analyst
Ministry of Industrial Development, SMEs and Cooperatives (Cooperatives Division)	Mrs Basanta Lala-Balgobin	Senior Cooperative Development Officer
Ministry of Labour, Human Resource Development & training	Mrs Nira Aumeer	Chief Employment Officer
Mopirove Ltd	Mr Sunjay Cheekhooree	Chairman & Managing Director
Natec Medical Ltd	Mr Stephane Lefevre	Chief Operation Officer
	Mr. Yoel Attias	Chief Financial Officer
National Productivity and Competitiveness Council (NPCC)	Ms Hemlata Ramsohok	Lead Research, Advisory and Knowledge Management

APPENDIX E
LIST OF STAKEHOLDERS AND PARTICIPANTS

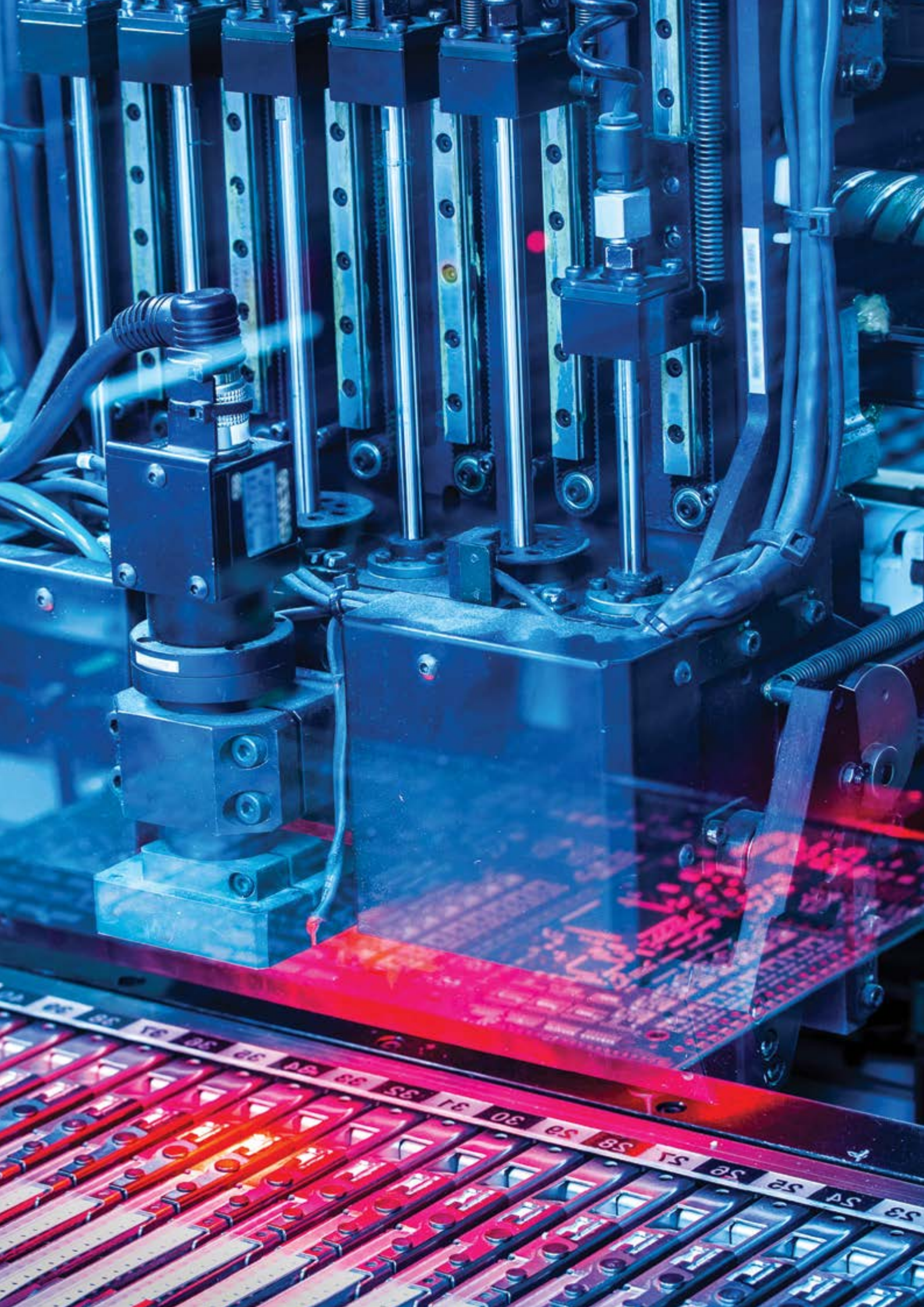
List of Participants in Consultative Workshop held on 27 February 2020

Ministry/Organisation/Company	Name	Designation
Princes Tuna	Mr. A.E Doomun	Managing Director
RT Knits Ltd	Mr Jean LI WAN PO	Executive Director
	Mrs Zaynab CHOZCHOO	Sustainability Specialist
	Mr. Kendall Tang	Executive Director
Ministry of Industrial Development, SMEs and Cooperatives (SME Division)	Mr. D. Conhye	Deputy Permanent Secretary
	Mr Maurice Chi Kam Chun	Assistant Manager
SME Equity Fund Ltd	Ms Shweta Beeharee	Portfolio Manager
SME Mauritius	Mr. Ravin Rampersad	Chief Executive Officer
Statistics Mauritius	Mrs Dhanwantee Ramphul	Statistician
T & T International Foods Limited	Ms Valerie Wong Kee Leong	Quality Executive
University of Mauritius	Prof. Dhanjay JHURRY	Vice-Chancellor
	Dr. Jaykumar CHUMMUN	Senior Lecturer
Valendor	Mrs Somah Oh-Seng	Quality Manager
World Knits	Mr. Espitalier Noel Adrian	Head of Procurement & Logistics
Ministry of Industrial Development, SMEs and Cooperatives (Industrial Development Division)	Mrs. B. F. Abdool Raman-Ahmed	Permanent Secretary
	Mr. A. Paul	Director of Industry
	Mrs. G. Ramnauth	Deputy Permanent Secretary
	Mrs. V. Appadoo	Assistant Permanent Secretary
	Mrs. D. E. O. K. Hassea	Assistant Permanent Secretary
	Mr. B. R. Domun	Principal Analyst (Industry)
	Mr. R. Sungkur	Principal Analyst (Industry)
	Mr. B. Soondur	Ag. Principal Analyst
	Mr. R. Bharosay	Senior Analyst (Industry)
	Mrs. K. Manna	Senior Analyst (Industry)
	Mr. B. Ramdoyal	Senior Analyst (Industry)
	Mrs. Z. Mandarun	Ag. Senior Analyst (Industry)
	Ms. H. Seeboruth	Analyst (Industry)
	Mr. B. Seedoyal	Analyst (Industry)
	Mr. B. Moothoosamy	Head, Business Information Unit(BIU)
	Mr. Y. Cader	Assistant to Head, BIU
	Mrs. A. Hauroo	Office Management Assistant
	Mrs. H. Hurchund	Assistant Systems Analyst

APPENDIX E
LIST OF STAKEHOLDERS AND PARTICIPANTS

List of Stakeholders contacted for the validation of Report

Ministry/ Departments/ Parastatal Bodies/Organisations	Name	Designation
Aremo Ltd	Mr. P. Gotze	Director
Assay Office	Mr. A. Somanah	Director
Association of Mauritian Manufacturers	Mr. B. Dubarry	Chief Executive Officer
Business Mauritius	Mr D. Venkatasawmy	Head, Collaborative Economic Development
Competition Commission of Mauritius	Mr. S. Puran	Head, Investigations
Eclosia Ltd	Mrs. V. Deschamps	Operations & Development Manager
Economic Development Board (EDB)	Mr Bucktowonsingh	Head of Department- Manufacturing (Traditional Sectors)
	Mrs. N. Jeetah	Head of Department Manufacturing (New Industries)
Fashion and Design Institute	Dr S. Ramsamy-Iranah	Director
FCI Sud Ltd	Mr. J.M. Even	Site Director
Federation of Jewellers	Mr. Santokhee	President
Ferme Marine de Mahebourg Ltd	Mr. L. Chiarini Petrelli	International Sales & Marketing Manager
FM Denim Ltd	Mr. D. D. Parikh	Director
Food and Agricultural Research and Extension Institute	Mr. A. Goolaub	Assistant Director (Extension & Training)
Human Resource Development Council	Mrs. T. Vaghjee-Rajiah	Senior Research & Development Officer
ISP Ltd	Mr. S. Beedasy	Chief Operations Officer
Jewellery Advisory Council	Mr. T. Ramkhelawon	Chairman
Landscope Mauritius	Mrs N. Hanoomanjee	Executive Director
Laurelton Diamonds Ltd	Mr. S. Rungasamy	Managing Director
Lilmo Ltd	Mr. G. Wong	Plant Manager
MAURITAS	Mr R. Gopee	Director
Mauritius Chamber of Commerce and Industry (MCCI)	Mrs. R. Narrainen	Manager- Trade Division
Mauritius Export Association	Mrs. L. Rajmun-Jossery	Director
Mauritius Ports Authority (MPA)	Mrs. N. Seebaluck	Ag. Director Port Operations
Mauritius Qualifications Authority	Mr R. Phoolchund	Director
Mauritius Research and Innovation Council	Mrs. P. Veer-Ramjeawon	Research Coordinator
Mauritius Revenue Authority	Mr. R. K. Bhunjun	Team Leader
	Mr. R. Oree	Ag. Assistant Director
Mauritius Standards Bureau	Mr M.Y.Foondun	Deputy Director
	Mr. S. Pillay Kanaksabee	Ag, Head of Unit, Quality Assurance
Ministry of Blue Economy, Marine Resources, Fisheries and Shipping	Mrs. M. Koonjul	Assistant Director, (Fisheries)
Ministry of Commerce and Consumer Protection	Mr Y. Coopoomootoo	Ag. Principal Analyst (Trade)
Ministry of Energy and Public Utilities	Mr. K. Rughoonath	Strategic Policy and Planning Officer
Ministry of Environment, Solid Waste Management and Climate Change (Solid Waste Management Division)	Mrs. A. Armoogum	Project Officer
Ministry of Finance, Economic Planning and Development	Mrs. S. Bedacee	Analyst/ Senior Analyst
Ministry of Foreign Affairs, Regional Integration and International Trade (International Trade Division)	Mr N. Boodhoo	Director, Trade Policy
Ministry of Health and Wellness	Mr. C. Bhugun	Senior Chief Executive
Ministry of Industrial Development, SMEs and Cooperatives (SME Division)	Mr. D. Conhye	Deputy Permanent Secretary
Ministry of Information Technology, Communication and Innovation	Mr. R. Hawabhay	Chief Technical Officer
Ministry of Labour, Human Resource Development and Training	Mrs. N. Aumeer	Senior Employment Officer
Natec Medical Ltd	Mr. Y. Attias	Chief Financial Officer
National Productivity and Competitiveness Council	Mr. D. Appalswamy	Director, Capacity Development, Corporate Services and operations
Princes Tuna (Mauritius) Limited	Mr.A. Elahee Doomun	Managing Director
Procurement Policy Office	Mr H. Rambhojun, OSK	Director
RT Knits Ltd	Mr. K. Tang	Director
SME Mauritius Ltd	Mr. R. Rampersad	Chief Executive Officer
University of Mauritius	Dr. (Mrs.) A.Bhaw-Luximon	Associate Professor



Ministry of Industrial Development, SMEs and Cooperatives (Industrial Development Division)
7th Floor, Air Mauritius Building, John Kennedy Street, Port-Louis
T: (+230) 210 0031
F: (+230) 211 0855
E: mind@govmu.org