
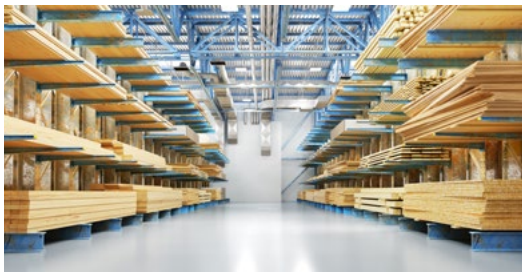


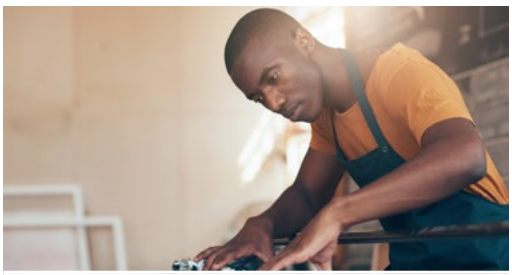




Assessment of Investment Opportunities Within the Manufacturing Sector in Botswana

JUNE 2020

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Table of contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AfCFTA	African Continental Free Trade Area
AGOA	African Growth and Opportunity Act
AU	African Union
BAP	Business Accelerator Programme
BDC	Botswana Development Corporation
BEMA	Botswana Exporters and Manufactures Association
BHM	Botswana Horticultural Market
BIDPA	Botswana Institute for Development Policy Analysis
BISIC	Botswana International Standards Industrial Classification
BITC	Botswana Investment and Trade Centre
BITRI	Botswana Institute for Technology Research and Innovation
BMC	Botswana Meat Commission
BOBS	Botswana Bureau of Standards
BURS	Botswana Unified Revenue Services
CCP	CEDA Credit Policy
CDE	Centre for Development Enterprise
CDM	Cold Dressed Mass
CEDA	Citizen Entrepreneurial Development Agency
CEE	Citizen Economic Empowerment
CIPA	Companies and Intellectual Property Authority
COMESA	Common Market for Eastern and Southern Africa
DAH	Department of Animal Production
DAR	Department of Agricultural Research
DTCB	Diamond Trading Company Botswana
DFI	Development Finance Institutions
DVS	Department of Veterinary Services
EAC	East African Community
ECOWAS	Economic Community of West African States
EDD	Economic Diversification Drive
EPA	Economic Partnership Agreement
EU	European Union
FAO	Food and Agriculture Organisation
FAP	Financial Assistance Policy
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FPMs	Fresh Produce Markets
FTA	Free Trade Area
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IDP	Industrial Development Policy
ISPAAD	Integrated Support Programme for Arable Agriculture Development
ITC	International Trade Centre
ITT	Invitation To Tender
IUMP	Industrial Upgrading and Modernisation Programme
JC	Junior Certificate
KPIs	Key Performance Indicators
LEA	Local Enterprise Authority
LIMID	Livestock Management Infrastructure Development
LPI	Logistics Performance Index
M&E	Monitoring and Evaluation
MFA	Multi Fibre Agreement
MFED	Ministry of Finance and Economic Development
MITI	Ministry of Investment Trade and Industry
MYSC	Ministry of Youth Empowerment Sports and Culture Development
NAPRO	National Agro-Processing
NDB	National Development Bank
NDP	National Development Plan
NEP	National Economic Policy
NES	National Export Strategy
NFTRC	National Food Technology Research Centre
NTM	Non-Tariff Measures
OBRS	Online Business Registration System
ODI	Overseas Development Institute
OECD	Organisation for Economic Cooperation and Development
PMPA	Pharmaceutical Manufacturing Plan for Africa
PPAD	Public Procurement and Asset Disposal
PPADB	Public Procurement and Asset Disposal Board
PPS	Probability Proportional to measure of Size
PSDP	Private Sector Development Programme
PSU	Primary Sampling Units
RIIC	Rural Industry Innovation Centre
RISDP	Regional Indicative Strategy Development Programme
RoO	Rules of Origin
RSA	Republic of South Africa
R&D	Research and Development
SABS	South African Bureau of Standards
SACU	Southern African Customs Union
SADC	Southern African Development Community
SCORE	SMME Competitiveness Rating Enhancement
SDP	Supplier and Development Programme
SEAP	SMME Expert Advisory Panel
SEZ	Special Economic Zones
SEZA	Special Economic Zones Authority
SMMEs	Small Medium Micro Enterprises
SPEDU	Selebi-Phikwe Economic Diversification Unit
SPS	Sanitary and Phytosanitary
SPSS	Statistical Package for Social Scientists
SQAM	Standards, Quality, Assurance and Metrology
SSA	Sub Saharan Africa
STEM	Science Technology Engineering and Mathematics
TFC	Third Country Fabric
TFTA	Tripartite Free Trade Agreement
ToRs	Terms of Reference
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
VAT	Value added Tax
WEBA	Women in Business Association
WEEP	Women Economic Empowerment Programme
WEF	World Economic Forum
WTO	World Trade Organisation
YDF	Youth Development Fund

CEO's foreword

The Citizen Entrepreneurial Development Agency (CEDA) was established in 2001 to provide coherent and holistic support for the development of sustainable citizen owned small, medium and large-scale enterprises. CEDA offers support through funding, training and mentoring of citizen enterprises with the aim of contributing towards the broader national objectives of economic diversification, employment creation, citizen economic empowerment, export substitution and poverty alleviation.

CEDA's mandate is in line with Botswana's economic transformation drive, which seeks to move the country towards high income status by reducing dependence on mineral revenue and generating growth based on competitiveness, productivity, efficiency and integration into global value chains.

Government continues to prioritize economic diversification and sustainable and inclusive growth as critical goals for the attainment of the Vision 2036. To this end, export-led industrialization and growth remain fundamental and recognized ingredients to placing the country on a high impact transformative path.

As such and in line with The Government of Botswana`s stated policy imperative of the need to develop a diversified and robust manufacturing sector, CEDA commissioned a study to assess investment opportunities within the manufacturing sector in Botswana, with a view to enabling both potential and existing CEDA clients to meaningfully exploit these opportunities.

The study retains a distinct focus and emphasis on the need to develop sustainable and growth oriented value chains within the identified manufacturing sub-sectors.

The study will certainly play a critical role in supporting government's efforts towards poverty reduction, employment creation and economic diversification by driving industrialization, boosting export led growth and generating foreign direct investment (FDI). It is also envisaged that the opportunities identified within the study will catalyse the development of other related niche and support sectors where the country has a comparative advantage.

However, such growth can only be harnessed if an enabling environment is created for investment; including policy changes, provision of well-developed infrastructure and use of advanced technology in production. A knowledgeable, skilled and highly productive workforce will also improve efficiencies and the quality of products and services.

Over the years, there has been a notable decline in the role of the manufacturing sector in the national economy. This has been attributed to a number of factors, amongst them skills shortage, failure to keep up with new technologies, lack of competitiveness and poor marketing techniques.

As CEDA, we have a responsibility to capacitate local SMMEs to become sustainable and it is our fervent believe that this study provides us insights on what needs to be done to strengthen the necessary institutional support and policy and regulatory framework to make our manufacturing sector competitive.

The study takes cognisance of the manufacturing industry's peculiar challenges and provides bespoke interventions that will boost its performance.

We firmly believe that we are now in a better position to enhance the performance and competitiveness of the manufacturing sector in Botswana, conduct value chain analysis and their consequent development, and carve out quantifiable opportunities for the advancement of a competitive SMME-led manufacturing sector.

However, it is important to note that the translation of the findings of the study and its recommendations into meaningful and long lasting impact will require the substantial collaboration and involvement of all relevant stakeholders.

Indeed, the generation of a comprehensive implementation plan drawing on the institutional capital of our national development and business development value chains, belies the foregoing and remains a functional prerequisite for the successful transformation of the manufacturing sector in Botswana.

I thank you.

Thabo Thamane
CEO

Executive summary

E1. Introduction and Background

The manufacturing sector has been chosen as one of the sectors that Botswana government could develop to achieve its twin objectives of employment creation and diversification of the economy. As a result, there has been a number of initiatives both at the national and regional levels aimed at developing the manufacturing sector. Despite these initiatives, the manufacturing sector has not performed as expected.

As a consequence, economic diversification and job creation have been slow, leading to the continued dominance of the mining sector in the economy and increasing rate of unemployment. Contribution of the manufacturing sector to GDP has averaged about 5 percent for the past ten years, with its latest contribution recorded at 5.2 percent in 2016 (Statistics Botswana, 2017). However, the full implementation of the Industrial Development Policy (IDP) is expected to drive the country's industrial development by attracting both local and international investors.

As an agency financing local enterprises, Citizen Entrepreneurial Development Agency (CEDA) is committed to assisting local investors to meaningfully participate in the opportunities brought by industrialisation. CEDA also provides mentoring services to its clients as well as technical assistance in order to minimise business discontinuation rates which have been found to be very high in Botswana.

In order for CEDA to come up with appropriate financing models and support for local manufacturing enterprises who want to take advantage of opportunities brought by industrialisation, there is need to understand needs of SMMEs in the manufacturing sector. It is against this background that CEDA has initiated a study whose main purpose is to identify business opportunities within the manufacturing sector, broadly conceptualised, to enable, both potential and existing, CEDA clients to meaningfully exploit the opportunities brought by industrialisation.

Unlike previous studies undertaken in the manufacturing sector which were carried out at a macro level, the current study takes a micro view of the manufacturing sector with the objective to come up with implementable initiatives for CEDA. Several studies in different countries have shown that the manufacturing sector has potential for growth, provided that an enabling environment is created for investment. These implementable initiatives will help propel the manufacturing sector and accelerate economic growth as well as job creation. The specific objectives of the study are to:

I. Conduct a baseline assessment of the state of the manufacturing sector in Botswana, with a focus on its performance and competitiveness. This assessment will be in line with clearly identified opportunities within the sector;

II. Conduct key priority sector and subsector mapping and value chain analysis to come up with clear and quantifiable opportunities in the short, medium and long term. This should include identifying supply chain opportunities at the local level;

III. Identify key areas of participation for SMMEs in the identified value chain opportunities with the potential to mature into sustainable business linkages locally, regionally and internationally;

IV. Identify key constraints to and clear mitigation measures for the development of a robust and competitive SMME led manufacturing sector. These constraints should include an assessment of productive output as well as human capital, infrastructure and technological requirements;

V. Identify both supply and demand constraints faced by export oriented SMMEs and recommend mitigation measures. These constraints hinder international market access;

VI. Develop for CEDA an incentive policy for export oriented SMMEs in the manufacturing sector;

VII. Assess local and international market access and identify impediments for SMMEs in the manufacturing sector and recommend mitigation measures;

VIII. Set parameters for competitive SMMEs that CEDA could use for appraisal;

IX. Recommend partnerships with institutions that have relevant technical expertise for the development of the manufacturing sector for CEDA to benchmark against.

X. Develop a CEDA monitoring and evaluation framework for the development of the manufacturing sector;

XI. Conduct policy and regulatory assessment within which SMMEs in the manufacturing sector operate and provide appropriate and implementable recommendations;

XII. Review the CEDA manufacturing sector support structure (human capital, financing and advisory model) and provide clear recommendations for its improvement; and

XIII. Develop for CEDA a manufacturing strategy with a coherent implementation plan that delineates the attainment of short, medium and long term gains and returns.

This report details, the methodology used, the main findings of the study and the recommendations for improving the CEDA support structure in order to enhance the performance of the manufacturing sector so that it contributes meaningfully to the economy.

E2. Methodological Approach

The manufacturing sector was defined according to the Botswana International Standards Industrial Classification (BISIC) developed by Statistics Botswana while SMMEs were defined as per the National Entrepreneurship Policy of 2019. The study used mixed methods approach to collect both primary and secondary data in order to meet the specific terms of reference. Primary data were collected from a representative sample (543) of manufacturing sector SMMEs across Botswana in all sectors as defined by Statistics Botswana. Other methods used to collect qualitative primary data were in-depth interviews with key stakeholders in the manufacturing sector as well as focus group discussions.

A literature review of the policy environment affecting the manufacturing sector was undertaken. In addition, benchmarking through desktop review was undertaken in order to learn from countries which have been successful in promoting their manufacturing sectors.

The benchmarking exercise covered several countries such as Kenya, Lesotho, India, Malaysia and South Africa. The issues covered under benchmarking include; the incentive structures, criteria for competitive SMMEs, interventions to promote SMMEs, SMME financing and institutions that CEDA could partner with in developing SMMEs in Botswana.

E3. Key Findings

E3.1 Policy Environment

The policy environment suggests that existing policies/strategies/initiatives support the growth of manufacturing sector SMMEs. The challenge lies in that Botswana's manufacturing sector is still in its infancy and thus firms rely on government financing and other support for their survival. The limited productive capacity of these firms hinder them from being able to take advantage of the conducive policy environment in the country.

The other challenge is delayed implementation of some initiatives such as the Supplier Development Programme (SDP) and the Industrial Upgrading and Modernisation Programme (IUMP). This, coupled with a fragmented incentive structure provided by various implementing agencies such as the Special Economic Zone Authority (SEZA) and the Selebi Phikwe Economic Diversification Unit (SPEDU), works against the sound policies that the country has formulated. Last but not least, implementing agencies such as the Ministry of Investment, Trade and Industry (MITI), Ministry of Finance and Economic Development (MFED), as well as the Public Procurement and Asset Disposal Board (PPADB) define manufacturing differently. For instance, the MFED defines manufacturing as substantial transformation of a product, while MITI defines it as simple packaging and processing which does not involve substantial transformation of a product.

The contradictory interpretations by the organisations in question undermine the positive effect that the policy environment can have on the competitiveness of SMMEs in the country. They undercut the potential of public procurement to drive industrialisation.

E3.2 Constraints to the Development of the Manufacturing Sector

Several factors have been found to hinder the development and competitiveness of manufacturing sector SMMEs in Botswana. These include among others limited access to finance, markets and raw materials, as well as limited manufacturing production related skills and support services.

Discrepancies in business regulations and quality certifications as well as inadequacies in ICT infrastructure have also impacted on SMME development. As a result, there is need for a coordinated effort between industry, government departments, and private sector associations to provide support for the manufacturing sector.

Constraints to access international markets have been found to be centred on inefficiencies in the national technical infrastructure. These may result in delays in pre-shipment inspections, certificates of origin, delays in conformity assessments, and inefficiencies in quality control measures. It has also been identified that standards and technical regulations are important for firms to access international markets.

The buyer-driven nature of retail supermarkets and their qualification requirements tend to be a significant impediment to market access for Botswana's manufacturing SMMEs. Initiatives to address these constraints include technical and financial support to manufacturing sector SMMEs to enable their participation in retail markets. The Woolworths retailer-led programme is a good example of how retailers can facilitate market access for SMMEs and should be replicated to cover other retailers and product coverage be increased.

Poor quality products have exacerbated market access constraints faced by SMMEs. This is compounded by the shortage of testing and certification laboratories, and related capacity constraints.

The potential of government procurement as a tool to promote industrial development in general, and manufacturing sector SMME growth in particular, is undermined by inconsistencies in the implementation of the Economic Diversification Drive (EDD) initiative, varying definitions of the manufacturing sector, lack of regard for quality and product certification in public procurement, and the cumbersome documentation requirements for SMMEs.

E3.3 Priority Sub-sectors for Manufacturing

A number of manufacturing subsectors were identified as a priority and these are: beef; leather, grain and horticulture (agro-processing); diamond; textile and apparels; automotive parts; and plastics, chemicals and pharmaceuticals. These subsectors were selected from key regional and national policies and strategy documents.

Apart from the beef and leather subsectors, all the other subsectors depend on imported raw materials as there is limited or no supply from local suppliers. This in itself can create problems especially if regional value chains are not well developed.

As a Development Finance Institution (DFI), CEDA was set up to promote citizen businesses and joint ventures in all sectors of the economy and use its well established appraisal system to do so. However, this does not mean that the Agency has to encompass all sectors and businesses as this would be untenable. If the Agency chooses to focus on particular subsectors of the manufacturing industry, it is simply a result of prioritization to increase value addition and employment which will have a general knock on effect on the rest of the manufacturing sector. This is consistent with Botswana's economic development objectives.

E3.4 Value Chain Mapping

Identified value chains have been categorised into local, regional and global. Local value chains involve the entire production process of converting raw materials to finished products taking place within Botswana borders. Regional value chains are characterised by the conversion of raw materials and other inputs into final products for export into the region, particularly South Africa. Global value chains involve local production of goods for export to global markets.

Under local value chains, numerous opportunities exist for manufacturing sector SMMEs. The beef and jewellery value chains were the only sectors found to have a positive trade balance. However, exports of manufactured products can be increased owing to the abundance of raw materials. Raw materials can also be increased by unlocking bottlenecks in the value chain in order to stimulate primary production.

For the other value chains, imports far exceed exports implying that there is enough market locally to absorb products from these value chains. This presents an opportunity for manufacturing sector SMMEs to increase their production to meet local demand and eventually export markets.

Other subsectors linked to regional value chains include soda ash, automotive parts, and chemical and chemical products. For soda ash, raw soda is exported to South Africa for further processing into a variety of products which are later sold back to Botswana as imports. This therefore means that there might be opportunities in the medium to long-term for further processing of soda ash into products for both the local and export markets. This can only be possible if the supportive infrastructure and policies are implemented as was done with diamond beneficiation. Opportunities are also available in the beneficiation of coal which can be used by local manufactures to produce chemicals for both local and export markets.

Despite the existence of these opportunities in the identified value chains, bottlenecks that inhibit the full production potential of SMMEs should be removed for full benefit. This should include supportive policies and a conducive business environment for SMMEs to operate.

E3.5 Criteria for Measuring SMME Competitiveness

The discussion on the criteria for measuring SMME competitiveness indicates that there are various approaches to doing it. These include: the development of a framework on guidelines and parameters for SMME supply side capabilities and competitiveness; the SMME competitiveness grid developed by International Trade Centre (ITC); and the SMME Competitiveness Rating for Enhancement (SCORE) developed by the government of Malaysia. Upon analysis of the three approaches, the Malaysian SMME competitiveness framework (SCORE) was deemed the most appropriate SMME competitiveness appraisal tool for CEDA to adopt albeit with some modifications. Success in the implementation of the Malaysian SMME competitiveness model would depend on a coordinated and coherent approach to SMME development. It would also require significant investment in the SMME rating software and requisite skills such as trained auditors, and certification and quality standards infrastructure. Since the Malaysian approach would require considerable implementation capacity, it is worth considering other programmes on competitiveness assessments, monitoring and evaluation of industry upgrading, etc. of the type offered by B&M Analysts which are likely to require relatively less in terms of resource requirements than the Malaysian SCORE SMME competitiveness framework.

E3.6 CEDA Support Structure

CEDA does not have a support structure specifically tailored to the needs of the manufacturing sector.

Regarding human capital, study results indicate that most enterprises profess to have technical skills, however the application of technology by most enterprises is still low. Under financing; manufacturing firms still cite lack of finance as one of their key constraints. They argue that funds provided are insufficient for business expansion. This may point to a missed opportunity where CEDA business advisory services are normally undertaken during project implementation when challenges are emerging rather than providing the service before project inception. This will ensure that appropriate interventions are put in place in pre-emption of possible challenges and will reduce business discontinuation rates in the manufacturing sector.

The interventions required to propel the manufacturing sector forward cannot be undertaken by CEDA alone. There is a need for close partnership and collaboration with government departments and other parastatals whose mandates can spearhead the development of the manufacturing sector.

E3.7 Incentive Policy for Export Oriented SMMEs

The discussion on the incentive policy for an export-oriented manufacturing sector revealed that CEDA does not have such a policy neither for the manufacturing sector as a whole nor for export oriented manufacturing enterprises. Proposals for export-oriented manufacturing sector incentives that CEDA should consider include; financing of certification of products (including maintenance of quality certificates), needs-based training of prospective exporting firms on technical regulations for importing countries, and preferential treatment for export-oriented firms at the project appraisal experience on EPZs provides valuable lessons on services offered to export oriented SMMEs which Botswana could draw from.

E4. Key Recommendations

The study has come up with key recommendations. These were categorised into two; those to be implemented by Government and other stakeholders, and those to be implemented by CEDA.

E4.1 Government and Other Stakeholders.

E4.1.1 Policy, Regulatory Environment and Market Access

- BITC should undertake an assessment of market access and other constraints faced by export-oriented manufacturing sector SMMEs with a view to determine possible areas for intervention and reform.

- BITC should strengthen Brand Botswana campaigns through initiatives such as mindset change programmes that support and encourage the consumption of locally produced products. These campaigns should be accompanied by a robust product quality and standards programme for SMMEs.

- Government should introduce retailer-led supplier development programmes. To ensure compliance, licensing conditions for retailers should stipulate a minimum proportion of manufactured goods sourced from local SMME manufacturers. Capacity to enforce and monitor such provisions should also be developed to facilitate adherence to these requirements.

- Government should promote production cooperatives for manufacturing sector microenterprises to upgrade production and marketing capabilities of SMMEs.

- Public procurement agencies should develop regulations in line with socio-economic provisions of the PPADB Act. These are aimed at promoting local manufacturing sector SMMEs through, among other interventions: reserve/set-aside a certain portion of the public procurement budget; preference schemes targeted at products manufactured locally by SMMEs. This should be backed by strong monitoring and enforcement; and stringent requirements for granting waiver requests.

Government should, through the socio-economic provisions of the PPADB Act, enhance participation of local manufacturing sector SMMEs by introducing price preferences for large tenderers/companies that sub-contract a set proportion of or form consortia with SMMEs.

- Procuring entities should set longer time period for the submission of tenders on the supply of manufactured products, develop and publish their multi-year procurement plans to enable local manufacturing SMMEs to effectively participate in the public procurement market.

- Government should make it a legal requirement that procurement entities should, at the time of advertising procurement opportunities, reference quality standards and include incentives (e.g. preferential treatment) on product quality standards as part of the evaluation criteria.

- ITT requirements, while upholding established standards, should be simplified to enable the participation of SMMEs in government tenders.

- A database of manufacturing sector SMMEs should be developed and these data used by procurement entities to invite SMMEs for bids.

- Government and parastatals should adopt a standard definition of what constitutes manufacturing with regard to targeted incentives.

- BOBS should introduce product quality support programmes with embedded graduation criteria for SMMEs in order to improve their market access, both locally and internationally. The product quality support programmes should include a subsidy on product standards and certification for SMMEs.

- Government should conduct an assessment of the institutional framework for standards development, standards setting and implementation agencies and the state of standards and certification infrastructure in Botswana.

- Government should enhance the institutional framework to promote coordination of the manufacturing sector including quality assurance and standards management.

- Government should develop a national strategy on the development of technical infrastructure for standards and certification. Furthermore, it should develop a fund for the implementation of the IUMP.

- Instruments of the Industrial Development Policy should be harmonised and aligned in terms of identifying industrial priority sectors.

- Government should undertake an assessment of the regulatory environment within which the manufacturing sector SMMEs operate, with a view to reduce the regulatory burden faced by SMMEs.

- Licensing requirements should, without compromising safety, health and environmental regulations, be customised to the type of business that is being licensed to avoid undue delays.

- Government should, in partnership with relevant institutions, devise a long-term financing plan aimed at committing to this strategy.

- Government should, in partnership with the private sector, build industrial parks with subsidised utility costs for small and micro manufacturing enterprises.

E4.2 Diamond Manufacturing Infrastructure

- Government should expedite the establishment of the diamond training school in order to improve skills of nationals on diamond polishing and cutting as well as jewellery making.

- Government should develop technical infrastructure such as laboratories and certification facilities to promote diamond beneficiation.

E4.3 Value Chain Mapping and Analysis of Priority Sectors

- Government should promote further processing of products that are currently exported in a semi-processed form.

- Government should develop a strategy to promote participation of local SMMEs in regional value chains. The strategy should address removal of bottlenecks through supportive policies and creating a conducive business environment for SMMEs.

- Expedite the implementation of the Leather Industry Park.

- Government should collaborate with the private sector to coordinate the development of skills required by manufacturing entities.

- Strengthen Research and Development (R&D) for the manufacturing sector. R&D institutions should collaborate with each other and SMMEs in the development of appropriate technology to facilitate production of quality goods to make SMMEs competitive.

E4.4 Partnerships and Incentive Policies

- Government should introduce additional fiscal incentives such as tax holidays, tax reductions or exemptions on imports, exports, labour, capital etc., in order to promote growth of the sector.

- Government, in partnership with the private sector and other stakeholders, should develop a framework that facilitates commercialisation of prototypes.

- Botswana should establish a National Council for SMME Development whose task will be to coordinate SMME policy related interventions. The Council should have clearly defined indicators to track performance and it should be chaired by His Honour the Vice President and the Ministry of Investment Trade and Industry should provide the secretariat.

E4.2 CEDA's Recommendations
CEDA's Support Structure

- CEDA should adopt a better coordinated approach to business advisory and liaise with all institutions involved in manufacturing sector SMME development.

- CEDA should establish a specialised unit that exclusively serves the needs of manufacturing sector SMMEs.

- CEDA should develop a mentorship programme focused on building capacity of manufacturing sector SMMEs, with a holistic M&E framework that informs the provision of these services.

- CEDA should, in collaboration with institutions like LEA and BIH that have established technology/business incubators, strengthen existing partnerships with a view to promote SMME technology development and enhance its business advisory services.

- In the interim, it is recommended that CEDA should consider engaging the services of B&M Analysts or similar institutions to design and implement SMME competitiveness appraisal programmes.

- For complex manufacturing projects, established as such by set criteria, independent industry experts should augment CEDA's Management Investment Committee during proposal assessment.

- To increase capacity of existing firms, attract new entrants and new export- oriented firms, CEDA should introduce specific incentives. These incentives could include lower interest rates, longer grace and repayment periods.

- CEDA should evaluate the impact of its activities on a continuous basis so as to identify and upgrade skills that are required to develop the manufacturing sector.

- CEDA's business proposal evaluation process should be aligned to the unique needs of the respective SMME categories within the manufacturing sector.

- Identify priority manufacturing focus areas and embark on an awareness campaign to prospective entrepreneurs about existing opportunities in the manufacturing sector in order to stimulate their interest in the sector.

- CEDA should strengthen its business advisory services to include development of SMME financial literacy programmes in collaboration with training institutions, universities, financial institutions, development partners and other stakeholders.

- CEDA should intensify funding of support programmes on quality standards and certification.

- CEDA should investigate the feasibility of introducing SMME needs-based diversified financial products to improve access to finance by SMMEs.

- CEDA should conduct an assessment that identifies and investigates barriers on trade finance for SMMEs engaged in international trade with a view to introduce the facility to support small and medium-sized firms.

- CEDA should investigate the feasibility of using franchises as a strategy for market access and product quality improvement with a view to enhance market access opportunities for CEDA- funded food processing SMMEs.

- CEDA should develop a needs-based mentoring and support programme on quality standards and certification focused on building capacity and technical skills in the different subsectors.

CHAPTER 1
Introduction

1.1 Introduction

Botswana's economic growth has been spearheaded by the mining sector, especially diamonds since their discovery in the late 1960s and exploitation in the early 1970s. The mineral sector has dominated the economy in terms of contribution to Gross Domestic Product (GDP), government revenue and exports. However, the mining sector has not been able to provide much needed jobs as the sector is capital intensive. Government has long recognised the need to diversify the economy away from mining especially because the mining resources are non-renewable and get depleted. This is particularly true of diamond resources which have generated much output, revenue and exports in the past decades.

The manufacturing[1] sector is one of the sectors that Government has chosen to diversify the economy. Investment in the sector is not only expected to increase its contribution to GDP, but to also create employment and reduce the high unemployment rate currently experienced by the country.

Government has also acknowledged the importance of SMMEs in economic development.

For instance, the tenth National Development Plan (NDP 10) states that in order to develop SMMEs and increase their contribution to the economy, there is a need to acquire accessible and affordable new technology and relevant industry skills which will facilitate domestic and global competitiveness. Through NDP 10, Government committed to the promotion of appropriate infrastructure to support SMME participation in the local economy. Government is also committed to the promotion of business linkages between SMMEs and large chain stores through the creation of supply contracts, joint ventures and partnerships.

The current long term vision for Botswana, Vision 2036 recognises the importance of manufacturing: "Our manufacturing sector has potential to contribute more to GDP by attracting investment, which will in turn create sustainable employment opportunities". Botswana's aspiration is to have a manufacturing sector that produces commercially viable, high value products targeted at the export market. The Vision calls for development and deployment of a skilled workforce that utilises appropriate technology to add value to natural and imported resources, in order to create high value products for the export market (Government of Botswana, 2016).

To diversify the economy away from mining, especially diamonds, the country has come up with various initiatives to support enterprises including manufacturing.

1 Manufacturing sector is defined as per Botswana International Standards Industrial Classification (BISIC) developed by Statistics Botswana.

These interventions include formulation of policies and initiatives such as the Financial Assistance Policy (FAP), the Small Business Act, Economic Diversification Drive (EDD), Industrial Development Policy (IDP), Citizen Economic Empowerment (CEE) Policy, Special Economic Zones (SEZ) Policy and others. Government has also come up with institutions such as the Citizen Entrepreneurial Development Agency (CEDA) and Botswana Development Corporation (BDC) to assist in the financing of enterprises. Lack of finance has been cited as one of the major impediments to setting up businesses, including manufacturing businesses. In addition, Government has provided entrepreneurial training through the Department of Industrial Affairs in the Ministry of Investment Trade and Industry (MITI) and more recently the Local Enterprise Authority (LEA). This intervention was meant to instil an entrepreneurship culture among Batswana which was found to be lacking.

Assistance to local enterprises has concentrated mainly on import substitution with a limited number of assisted enterprises focusing on the export market. Support to export oriented manufacturing sector SMMEs is even more critical as there is increased competition due to globalisation. The Industrial Development Policy (IDP) emphasises a shift from the import substitution strategy to an export-led growth one to support long term economic growth through globally competitive enterprises.

The Policy's quest to promote export led growth is supported by the Botswana National Export Strategies (NES) of 2010 and 2019 as well as the Special Economic Zones Policy of 2011.

The main objective of these initiatives is to expand the export base through product diversification and placing new products in the international market with a view to attract Foreign Direct Investment (FDI) and create employment. Focusing on export led growth is critical for Botswana's long term economic growth as the local market is limited by the country's small population.

Regionally, initiatives have been undertaken to develop the manufacturing sector. Such initiatives include the Southern African Development Community (SADC) Industrialisation Strategy and Roadmap (2015-2063) which was approved in 2015 and is aligned with the African Union (AU) Agenda 2063. The main objective of the Strategy is to transform SADC economies, enhance economic growth and create empowerment.

The Strategy is anchored on three pillars: industrialisation as a champion of economic and technological transformation; competitiveness as an active process to move from comparative advantage to competitive advantage; and regional integration and geography as the context for industrial development and economic prosperity.

The strategy specifically focuses on value addition through processing, especially for agricultural and mineral products as some of the avenues for promoting industrialisation.

Through the strategy, the SADC region aims to double the share of the manufacturing sector value addition in GDP terms to 30 percent by 2030 and 40 percent by 2050. This includes the share of industry-related services and increasing the share of industrial employment as a proportion of total employment by 40 percent by the year 2030. Further, the Strategy aims to develop viable regional value chains capable of integrating with global value chains. It aims also to identify areas where the SADC region can harvest the greatest success by capturing high opportunities based on the present and future trends and capabilities.

Despite the above national and regional initiatives, the manufacturing sector has not performed as expected. As a result, economic diversification and job creation have been slow and led to the continued dominance of the mining sector in the economy and a high unemployment rate. Manufacturing sector contribution to GDP has averaged about 5 percent for the past ten years, with its latest contribution recorded at 5.2 percent in 2016 (Statistics Botswana, 2017). However, the full implementation of the IDP is expected to drive the country's industrial development by attracting both local and international investors.

1.2 Objectives

The study sought to address the following research questions:

- What challenges are facing the manufacturing sector and what can CEDA do to assist the sector?
- Are CEDA products and services comprehensive enough to develop manufacturing sector SMMEs?
- What can the Agency do to promote export oriented manufacturing sector SMMEs?
- Does CEDA have a responsive structure and organisational capacity to meet demands of the manufacturing sector?
- What parameters can CEDA use to gauge a competitive SMME?
- Which existing policies can be leveraged for the growth of the SMME sector?

In an attempt to answer the above questions, the study focused on the following broad areas:

- Manufacturing sector production areas mapping and value chain development.
- Market access, its impediments and their mitigation.
- Competitiveness of local SMMEs in terms of technological uptake and quality of produce.
- Capacity, linkages and partnerships, both nationally and internationally.
- CEDA support structure for SMMEs including financing, technical, human and organisational capacity.
- The micro and macro environment within which the manufacturing SMMEs exist.

The specific terms of reference for the study were as follows:

I. Conduct a baseline assessment of the state of the manufacturing sector in Botswana, with a focus on its performance and competitiveness. This assessment will be in line with clearly identified opportunities within the sector;

II. Conduct key priority sector and subsector mapping and value chain analysis to come up with clear and quantifiable opportunities in the short, medium and long term. This should include identifying supply chain opportunities at the local level;

III. Identify key areas of participation for SMMEs in the identified value chain opportunities with the potential to mature into sustainable business linkages locally, regionally and internationally;

IV. Identify key constraints to and clear mitigation measures for the development of a robust and competitive SMME led manufacturing sector. These constraints should include an assessment of productive output as well as human capital, infrastructure and technological requirements;

V. Identify both supply and demand constraints faced by export oriented SMMEs and recommend mitigation measures. These constraints hinder international market access;

VI. Develop a CEDA incentive policy for export oriented SMMEs in the manufacturing sector;

VII. Assess local and international market access and identify impediments for SMMEs in the manufacturing sector and recommend mitigation measures;

VIII. Set parameters for competitive SMMEs that CEDA could use for appraisal;

IX. Recommend partnerships with institutions that have relevant technical expertise for the development of the manufacturing sector for CEDA to benchmark against.

X. Develop a CEDA monitoring and evaluation framework for the development of the manufacturing sector;

XI. Conduct policy and regulatory assessment within which SMMEs in the manufacturing sector operate and provide appropriate and implementable recommendations;

XII. Review CEDA manufacturing sector support structure (human capital, financing and advisory model) and provide clear recommendations for its improvement; and

XIII. Develop a CEDA manufacturing strategy with a coherent implementation plan that delineates the attainment of short, medium and long term gains and returns.

1.3 Organisation of the Report

The report is organised as follows:

Chapter 2 covers the methodological approach which details how the study was undertaken and how the objectives of the study were achieved.

Chapter 3 deals with the regulatory and policy framework within which the manufacturing sector operates.

In Chapter 4, the current state of the manufacturing sector is presented. It is in this chapter that the performance of the manufacturing sector and the challenges facing the sector are highlighted. This includes access to both local and export markets.

Chapter 5 discusses the key constraints to the development of a robust and competitive SMME-led manufacturing sector.

Chapter 6 identifies priority manufacturing sectors which CEDA should focus on developing.

Chapter 7 develops value chains for these priority sectors and identifies quantifiable opportunities for SMMEs.

The CEDA support structure for manufacturing sector SMMEs is reviewed in Chapter 8 with an aim to suggest strategies for its improvement. This includes also setting parameters for gauging SMME competitiveness which CEDA could use for appraisal. The chapter also discusses the human capital, financing and advisory models.

Chapter 9 discusses partnerships that CEDA could enter into for technical expertise as well as the incentive structure for export oriented SMMEs.

Chapter 10 concludes the report with a summary of major findings and recommendations.

CHAPTER 2
Methodological approach

The study used a variety of methods to achieve its purpose and the specific terms of reference. It followed four methods of data (primary and secondary) collection: enterprise survey; in-depth interviews; focus group discussions (FGD); and desktop reviews and benchmarking. In some cases, a combination of these methods was used to meet specific ToRs, while in other instances only one method was used. However, a detailed description of the proposed methods of data collection and analysis is presented below.

2.1 In-depth Interviews

In-depth interviews were conducted with key stakeholders in the manufacturing sector as well as with CEDA. An in-depth interview is a data collection tool in which qualitative data is collected from respondents. Interviews were carried out with stakeholders from Government ministries and departments, parastatals, the private sector and manufacturing sector associations (Annex 3).

Through in-depth interviews, the study identified key priority sectors and subsectors as well as supply chain opportunities in the manufacturing sector. The interviews identified key constraints and their mitigation measures for the development of a robust and competitive SMME-led manufacturing sector. Key stakeholders assisted in the identification of critical areas of participation by SMMEs in the identified value chain opportunities in the short, medium and long term.

Additionally, in-depth interviews were carried out with CEDA board members, management and relevant staff members to review its support structure and provide clear recommendations for its improvement. Information derived from this exercise will also assist to craft the CEDA Manufacturing Sector Strategy together with its implementation plan and monitoring and evaluation framework.

2.2 Focus Group Discussions Focus

Focus Group Discussions (FGDs) are a qualitative data collection tool where information is collected from multiple stakeholders at a time. The aim of the FGDs was to get views of business owners as a group and to afford as many manufacturers as possible a chance to participate in the study. The initial target was six FGDs (three in the North and three in the South), but only five were carried out (three in the North and two in the South) due to a limited number of willing participants in Gaborone (South). The FGDs were carried out in the following places: Francistown - 2, Palapye - 1, Gaborone - 1, and Kanye - 1. FGD participants were a mixture of CEDA funded individuals and businesses as well as non-CEDA supported entities.

2.3 Document Review

This involved collection of secondary data through a review of studies undertaken in the manufacturing sector in general and Botswana in particular.

It involved collection of statistical data on employment, output and trade in key manufacturing subsectors. The review covers assessment of the policy and regulatory framework within which the manufacturing sector operates. The document review identifies both supply and demand constraints faced by export oriented SMMEs and recommends mitigation measures. It assesses local and international market access and associated impediments for the manufacturing SMMEs and recommends mitigation measures. Moreover, the review provides data for the identification of key priority subsectors within the manufacturing sector.

The analysis of the policy and regulatory assessment is drawn partly from the following policy/strategy documents and legal instruments:

- The National Development Plans (NDP)
- Industrial Development Policy (IDP)
- The Industrial Upgrading and Modernisation Programme (IUMP) which has been developed to strengthen industrial capacities of Botswana's SMMEs.
- The Economic Diversification Drive (EDD) Initiative
- Citizen Economic Empowerment (CEE) Policy
- Special Economic Zones (SEZ) Policy
- Policy on Small, Medium and Micro Enterprises in Botswana
- National Trade Policy
- National Export Strategy (NES)
- The AGOA National Response Strategy targeted towards improving utilization of preferences under AGOA
- Reservation Policy
- The Small Business Act
- National Entrepreneurship Policy
- The Trade Act
- Doing Business Roadmap and Action Plan.
- The SADC Industrialization Strategy Review
- World Bank Enterprise Surveys
- Value chain studies on beef, horticulture, and leather industries undertaken by Centre for Development Enterprise (CDE), through the Private Sector Development Programme (PSDP).

2.4 Benchmarking

In order to learn from other countries and institutions, a benchmarking exercise against countries or institutions which have been successful in developing the manufacturing sector was undertaken.

This exercise was undertaken through desktop review and specifically informed the identification of relevant bodies or institutions that CEDA can benchmark against for technical expertise. The study also reviewed the CEDA manufacturing sector support structure with an emphasis on human capital, financing and advisory model and provided clear recommendations for the improvement of these areas. The benchmarking exercise assisted to set up parameters to gauge SMME competitiveness that CEDA could use for appraisal. The exercise assessed the existing incentive structure for the manufacturing sector in general and the export oriented manufacturing sector SMMEs in particular. Finally, the exercise reviewed the technical and human capacity development support offered manufacturing sector SMMEs in countries like Kenya, India, Philippines, South Africa and Malaysia that have been successful in developing their manufacturing sector SMMEs.

2.5 Enterprise Survey

2.5.1 Data Collection Instrument

The enterprise survey involved collection of qualitative and quantitative primary data on manufacturing sector SMMEs. The data were collected through an administered questionnaire using trained research assistants. The questionnaire was administered face-to-face with business owners or managers. This method is effective in that it has a high response rate and research assistants are available to clear ambiguities that may arise during the interviewing process.

The questionnaire gathered information on the current state of manufacturing firms, challenges faced by as well as opportunities available in different subsectors. The questionnaire also obtained information on what CEDA could do to facilitate development of the manufacturing sector. The study reviewed the comprehensiveness of CEDA products and services to promote manufacturing sector development, and in particular export oriented manufacturing sector SMMEs.

The enterprise survey addressed the need to conduct a baseline assessment of the state of the manufacturing sector in Botswana with a specific focus on its performance and competitiveness. The survey further informed the value chain mapping and analysis, identification of priority sectors and areas of participation by SMMEs, the CEDA incentive policy as well as local and international market access.

2.5.2 Sample Selection

The questionnaire was administered to a representative sample of manufacturing sector SMMEs selected across the country. The target respondents were business owners and/or managers of the sampled establishments. The respondents included enterprises assisted by CEDA and the non-CEDA supported ones.

The manufacturing sector has a diverse number of activities and in selecting the sample consideration was given to be inclusive.

To do this successfully, a list of manufacturing enterprises was categorised into subsectors using the Botswana International Standard Industrial Classification (BISIC) Revision 4 (Annex 2). The BISIC has 23 subsectors under classification of the manufacturing sector.

A stratified random sampling technique was employed for the selection of localities and firms within the selected areas. The selection of localities ensured there was representation of the following localities; cities, towns, urban villages, rural areas and remote areas.

The stratified two-stage probability sample design was used for the selection of the sample. The first stage was the selection of enumeration areas (localities) as Primary Sampling Units (PSUs). Choice of localities was based on the availability of manufacturing firms.

The second stage of sampling was the actual number of firms systematically selected within each selected enumeration area (locality). The selection of manufacturing firms was done using the Probability Proportional to measure of Size (PPS), where a measure of size was the number of firms in each subsector and a subsector with a higher number of firms has the larger sample. This was also done with the localities, those with the highest number of firms have a larger sample.

There are different methods used to calculate the sample size depending on the nature of the study, time frame, and budgetary constraints. Whatever method is chosen; the computed minimum sample size should be large enough for reliable statistical inferences to be made based on it.

The method chosen for the selection of the sample size is the one in which the margins of error were specified for the items that are regarded vital to the study. This is known as the alpha level of significance which is the level of acceptable risk the researcher is willing to take that the true margin of error exceeds the acceptable margin of error known as Type I error.

The alpha level used in most surveys is either .05 or .01 (Ary, Jacobs and Razavieh, 1996). Precision level used in the study is 0.075 (7.5 percent) and alpha level of 0.1 which yields Z-value of 1.645 (Krejcie and Morgan, 1970). We used the recommended ρ-value, ρ = 0.5 (United Nations, 2005) for this study.

The sample size was calculated using the total number of Botswana manufacturing businesses provided by Statistics Botswana, which are estimated at 2649.

Using the formula developed by the World Bank (2009), which calculates sample size for enterprise surveys, we obtain:

$$n = [\frac{1}{N} + \frac{N-1}{N}\frac{1}{PQ}(\frac{k}{z_{1-\alpha/2}})^2]^{-1}$$

Where;
N= population size
P= prevalence in the absence of prior information, P=0.5
Q= (1-P)
k= desired level of precision; 7.5%
$z_{1-\alpha/2}$ = 1.645 value of the standardized normal for a desired level of confidence, 90%

$$n = \left[\frac{1}{2649} + \frac{2649-1}{2649}\frac{1}{(0.5)(0.5)}\left(\frac{0.075}{1.645}\right)^2\right]^{-1} = 407$$

Adjusting for non-response especially for enterprise surveys is essential as participation in surveys is lower for firms as compared to individuals/households. World Bank (2009) recommends an adjustment of the sample size by 25 percent for non-response. Therefore, adjusting for non-response we obtain a total sample of 542.66 which we round off to 543 enterprises.

Three subsectors; tobacco manufacturing, coke and refined petroleum products manufacturing, and the manufacturing of pharmaceutical, medical and botanical products could not be selected using our sampling criteria as they had very low number of firms. However, two additional firms from the subsectors of tobacco manufacturing and manufacturing of pharmaceutical, medical and botanical products were added as data from Statistics Botswana indicated that they existed. No firm in the manufacturing of coke and refined petroleum products subsector existed. These additional firms are located in Gaborone and this increased the total sample to 545 firms.

Table 2.1 shows the sampled enterprises by locality type and the number of firms in each locality. As shown in the table, only three locality types are represented: cities, towns and urban villages.

This suggests that there are no or limited manufacturing enterprises in other locality types; rural areas and remote areas. Annex 1 shows the sampled enterprises by locality and subsectors.

Table 2.1: Sampled Enterprises by Locality Type

Locality	Locality Type	Number of Respondents
Francistown	City	68
Gaborone	City	251
Kanye	Urban Village	18
Lobatse	Town	15
Selebi-Phikwe	Town	24
Letlhakane	Urban Village	14
Mahalapye	Urban Village	19
Maun	Urban Village	30
Mogoditshane	Urban Village	32
Molepolole	Urban Village	15
Palapye	Urban Village	23
Serowe	Urban Village	17
Tlokweng	Urban Village	19
Total		545

Slight changes were made from the initial sample to the actual sample and these were mainly attributable to several challenges which were faced during the data collection stage (shown in section 2.7). Table 2.2 shows the initial intended sample against the actual number of firms sampled and interviews during data collection. The table shows that a total of 543 firms instead of 545 were sampled and their owners or managers interviewed.

Table 2.2: Establishment's Main Economic Activity

Subsector	Initial Sample	Final Sample	Percent
Basic Metals	10	12	2.2
Beverages	10	10	1.8
Chemicals and Chemical products	22	20	3.7
Computer, Electronic and Optical products	3	2	0.4
Electrical Products	6	7	1.3
Fabricated metal Products, except machinery and equipment's	43	41	7.6
Food product	127	128	23.6
Furniture	16	20	3.7
Leather and Related Products	7	4	0.7
Machinery and Equipment	5	5	0.9
Motor Vehicle, Trailers and Semi-Trailers	5	5	0.9
Other Manufacturing	16	15	2.8
Other Non-Metallic Mineral Products	50	51	9.4
Paper and Paper Products	6	5	0.9
Pharmaceuticals	1	1	0.2
Printing and Reproduction of recording Media	48	49	9.0
Repairs and Installation of Machinery and Equipment	40	34	6.3
Rubber and Plastics Products	11	9	1.7
Textiles and wearing apparels	106	114	20.9
Tobacco	1	0	0
Wood, Cork, Straw and Plaiting Materials	12	11	2.0
Total	545	543	100

Note: Textile and wearing apparel subsectors were merged into one sector because it was trivial to separate the activities of the two subsectors.

2.6 Data Processing

Data processing includes data entry, cleaning and analysis. Before data entry began, a template was designed for survey data using Statistical Package for Social Scientists (SPSS) version 23. The advantage of this software is that data can be easily exported to other statistical software packages. Before data entry, questionnaires were assigned serial numbers so that cleaning and re-checking could be made easily. Data were entered into data file using SPSS.

After data entry, preliminary analysis was undertaken to identify any errors. Where errors were identified the serial numbers were used to identify such questionnaires. After data cleaning was completed, data were analysed using mainly descriptive statistics such as frequency tables and cross tabulations.

Documentary reviews were analysed using content analysis which involved classifying data into relevant categories. Similarly, in-depth interviews were analysed by arranging data collected in appropriate categories according to their content. Additionally, information from benchmarking through desktop review was used to bring in experiences from other countries, particularly on how best to develop the manufacturing sector.

2.7 Study Limitations and Challenges

A number of challenges were encountered by the consulting team during the study, some of which are explained below.

The first challenge encountered during data collection was that the list of manufacturing businesses sourced from Statistics Botswana was not up to date and incorrect. This list was used as the sampling frame and hence determined the number of respondents for each location and in the different subsectors. Some of the companies were either not operational or had relocated from the initial location or to a different manufacturing subsector. Furthermore, some businesses identified in the list as manufacturers were found to be distributors and retailers. The database also contained wrong or missing contacts of companies or the contacts were not in use. This presented a challenge for researchers when they scheduled interviews with the different companies.

As a remedy, the researchers located the companies or replaced them with others found through online searches and enquiring from residents of the identified locations. In some cases, the researchers had to substitute the sampled respondents with respondents from different subsectors in order to meet the target sample as some subsectors had limited respondents or were non-existent. The Statistics Botswana database also had companies that appeared more than once, which meant that the overall sample was higher than it should have been due to double counting of companies in the sample frame.

Secondly, BISIC 4 divides the manufacturing sector into 23 subsectors as shown in Annex 2. Some survey respondents refused to participate as they felt their businesses were not part of the sector as determined by the BISIC classification.

To solve this problem, the researchers explained the classification to business owners and convinced some to participate in the study.

The third challenge relates to the list of CEDA funded manufacturing companies as provided by the Agency, it was used to get a representation of CEDA funded companies. However, the list was not up to date as some of the companies were not operating or the contacts were either missing or not in use. This presented a challenge when locating these firms and the initial target sample of 67 CEDA companies was not met. Only 50 CEDA funded companies were interviewed instead. The list also contained CEDA funded individuals who were to be included in the FGDs. Due to the challenge of lists that are not up to date, researchers were unable to get hold of some of the individuals on the list.

The fourth challenge was that survey respondents were not forthcoming with information to do with financial standing and performance of their businesses as they felt it would not be handled confidentially. As a mitigation measure, researchers followed up respondents for the missing information and also assured them that confidentiality would be observed. However, some respondents still did not share the information.

The fifth challenge concerned FGDs. There was a low respondent turnout of about 50 per cent. There seemed to be a negative attitude towards CEDA discussions sessions as participants felt they attend such sessions but are never given feedback.

The sixth and last challenge encountered during data collection was that some survey respondents and stakeholders did not turn up for meetings (FGDs and in-depth interviews) as agreed, while others cancelled meetings at the last minute. This prolonged the data collection period and left researchers with limited time to analyse the data. The non-attendance of sessions by some respondents can be attributed to a lack of interest in the study as they could not readily identify how it would benefit them.

CHAPTER 3

Policy and regulatory framework for supporting manufacturing sector SMMEs

The purpose of this chapter is to review all policies/ strategies/initiatives that have a bearing on manufacturing sector SMMEs. The aim is to assess whether they present an enabling environment for SMME growth or they hinder their growth. According to a SADC Report, the three policies essential for creation of an enabling environment for SMME growth are the SMME Policy, the Competition Policy and the Procurement Policy. The review evaluates these three policies together with other relevant policies such as the Industrial Development Policy and the National Export Strategy. The aim is to conduct a policy and regulatory assessment and provide appropriate and implementable recommendations.

3.1 Policy on Small, Medium and Micro Enterprises in Botswana

The Government of Botswana recognises the importance of SMMEs in the economic development of the country, in particular in employment generation and citizen economic empowerment. For this reason, a national Policy on Small, Medium and Micro Enterprises was developed in 1998 to encourage a culture of entrepreneurship and provide support for SMME start-ups in the country.

Aspirations of the policy are to: foster citizen entrepreneurship and empowerment; achieve economic diversification; promote exports; and to encourage the development of a competitive and sustainable SMME community.
To realise the aspirations of the policy, government set up institutions like CEDA, LEA etc. mandated with its operationalization. CEDA provides financing for enterprises while LEA provides business advisory services and is responsible for building a business culture.

The goal of the SMME policy is notable, in contrast the entrepreneurship culture is still lacking in the country with many SMMEs largely dependent on Government for survival. Further, not much has been achieved with regards to economic diversification as exports still come predominantly from the mining sector.

To develop a competitive and sustainable SMME community, study respondents have suggested that the entrepreneurship policy should link innovation and industrial development. The current scenario is that policies that promote innovation are not integrated and there is no coordinated implementation plan.

3.2 Citizen Economic Empowerment (CEE) Policy

Related to the SMME Policy is the Citizen Economic Empowerment Policy of 2012 whose main aim is to ensure that citizens play a meaningful role in the development of the economy.

The implementation strategy of the CEE Policy is premised on eight pillars and four of these are relevant to manufacturing sector SMMEs' growth. These are: entrenchment of citizen empowerment in social and economic policy; enhancing global competitiveness through empowerment and partnerships; transforming the economy to be private sector led; and procurement and licencing to improve empowerment.

The private sector in Botswana is expected to play a significant role in economic diversification, employment creation and economic development through the creation of globally competitive SMMEs. Yet, the majority of SMMEs are still heavily reliant on government support, a trait that stakeholders link to lack of development and enforcement of national quality standards by the authorities. In addition to the national standards that are developed by the Botswana Bureau of Standards (BOBS), there are other quality control and standards requirements that are dictated by the export markets.

These include, but not limited to, human and animal health, food safety standards, fair trade and organic certification. Although these are not mandatory standards, they nonetheless play a crucial role in the competitiveness of exports.

3.3 Economic Diversification Drive (EDD) Initiative

Given the key constraint to the creation of globally competitive SMMEs as evidenced by the limited ability of the private sector to transform the economy, the Economic Diversification Drive (EDD) strategy was developed in 2011. In the long run, this strategy hopes to promote the development of a globally competitive private sector that needs little or no government protection and support. In developing productive capacity of firms for both domestic and global markets, the EDD strategy emphasises export-led growth.

The strategy is premised on two approaches: the EDD Short Term and EDD Medium to Long-Term Strategies. On the one hand, the objective of the EDD Short Term Strategy is to take advantage of government purchasing power in an effort to promote local procurement. This is achieved through the use of government interventions such as Citizen Economic Empowerment strategies and preference schemes. According to a SADC Report, in order to enhance SMME growth, procurement initiatives of government must include preference schemes that take into account the unique needs of SMME enterprises.

In Botswana's context, preferences such as local procurement schemes have provisions that empower specific categories of bidders such as women, youth and the disabled. However, the provisions are not specific to SMME promotion. The socio-economic provisions of the PPADB Act could instead be used to promote manufacturing sector SMMEs.

A good example is the Selibe Phikwe Economic Diversification Unit (SPEDU) Revitalisation Programme which dictates that procuring entities should set aside 30 percent of their procurement budget for enterprises located in the SPEDU region. While the set-aside is not specific to the manufacturing sector, it could be viewed as promoting manufacturing and SMME development in the SPEDU region.

The Medium to Long-term Strategy, on the other hand, aims to develop globally competitive firms that require little or no government intervention. This strategy aims to diversify exports and export markets, to develop goods and services that comply with local and international standards, and develop an entrepreneurship culture as well as enhance citizen participation in the economy.

To enhance enterprise development, the Tokafala Initiative (a collaboration between the Government of Botswana and Anglo-American) is implemented under the EDD programme to address supply-side constraints faced by firms such as assistance with human resource policies of firms and business plans among others.

While the EDD Strategy has good intentions of developing globally competitive SMMEs, the uptake of the manufacturing aspect of the EDD strategy has been slow. This is partly due to the misinterpretation of its implementation on the part of procuring entities. In addition, there is no database on locally produced goods which procuring entities could refer to when preparing their procurement plans. The contradictory interpretations of the objectives of the Short-term Strategy of the EDD also partly contribute to the limited graduation of SMMEs from government support. While other stakeholders view the short-term strategy as serving the objective of import substitution, others view it as promoting locally produced goods. On the one hand, if the import substitution strategy is adopted then locally produced goods would have to compete with imported ones and this can only be achieved if locally produced goods are of good quality. On the other hand, however, promotion of locally produced goods does not have this mandatory feature associated with good quality, thereby exacerbating the perceived poor quality of locally produced goods.

Moreover, there are inconsistencies in the definition of manufacturing between the Ministry of Finance and Economic Development (MFED) and MITI with regard to targeted incentives. MFED offers tax incentives to manufacturing firms using the criteria of substantial transformation of a product, while MITI support to the manufacturing sector includes support to all manufacturing including simple packaging and processing. MITI criteria for support to manufacturing has no particular bias to substantial transformation as outlined in the trade agreements that Botswana is signatory to.

3.4 National Competition Policy for Botswana

The main aim of any competition policy is to improve market access especially for SMMEs that must compete against large firms. Even though large firms can be seen to promote supply chains that are beneficial to SMMEs, they (large firms) can also engage in anti-competitive behaviour that results in market concentration. With this in mind, the Government of Botswana developed a National Competition Policy in 2005 to prevent and redress any possible anti-competitive practices in the country.

The objectives of this policy include amongst others: to support economic growth and diversification; to prevent and redress unfair practices adopted by firms against consumers and small businesses in Botswana; to prevent and redress anti-competitive practices in the economy and remove unnecessary constraints on the free play of competition in the market; and to support other policy initiatives such as citizen economic empowerment and access to essential services without prejudice to the pursuit of the overall efficiency and competitiveness of the economy.

The National Competition Policy, therefore, levels that playing field where large firms co-exist with SMMEs. This stimulates an increase in investment and expands the export base of the country. The challenge remains that the country's manufacturing sector is still in infancy and this jeopardises the development of value chains which usually require the presence of mature industries.

3.5 Industrial Development Policy (IDP)

An industrial policy of any country serves as an overarching policy framework guiding the role of the industry and industrial growth in spearheading economic development. The inaugural Industrial Development Policy (IDP) for Botswana was adopted in 1998. Its objectives included amongst others: promotion of industries based on available natural resources and value addition; support for increased competitiveness through the promotion and expansion of services available to micro, small and medium-sized enterprises, manufacturing industries and export-oriented sectors including provision of land, factory shells, insurance, quality standards, investment incentives, reduced utility costs, increased data, marketing programme and regulatory reform; greater utilisation of technology in industrial development; as well as focus on micro, small and medium-sized enterprises and related support efforts.

In 2014, government adopted the revised Industrial Development Policy, whose objectives include: expanding the country's industrial base through the development of diversified, sustainable and globally competitive industries; and to focus on export-led growth while simultaneously exploring other sectors with the potential to drive industrial growth. This policy remains complementary to other Government policies that facilitate the attainment of export-led economic diversification and growth.

Although progress has been made in promoting the economy to be industry-driven, the manufacturing share of GDP remains small at around 5 percent. The underlying issues include, but are not limited to, the use of obsolete equipment in manufacturing production, which is characterised by low technology and automation, fuelling in part the supply side constraints that firms face. To this end, the Industrial Upgrading and Modernisation Programme (IUMP) was developed to curb some of the constraints related to obsolete equipment and technology. However, the programme has not been implemented yet due to funding constraints.

Regarding the management of the IUMP, a review of country experiences suggests that institutional structures vary depending on country experiences. For example, the Namibian IUMP document proposes the establishment of a National Steering Committee (comprising of representatives of the public, private and financial sectors) supported at the operational level by an Office for Industrial Upgrading and Modernisation (autonomous or supported by the Ministry of Trade and Industry) and supervised by the Ministry of Trade and Industry.

In Senegal, implementation of the IUMP was a result of a partnership between the Senegalese Government, the private sector, the United Nations Industrial Development Organisation (technical partner), and a donor (the French Development Agency).

In Tunisia, UNIDO made significant contributions in terms of formulation and implementation of the National Upgrading Programme. The Italian Government financed the programme and partners included the Ministry of Industry and Agency for the Promotion of Industry and Innovation. The Tanzanian IUMP was implemented by the Ministry of Industry and Trade with technical assistance from UNIDO. A special unit, the Upgrading Unit Tanzania, has been established to oversee the day-to-day operational issues of the programme.

From the discussion of IUMPs in different countries, it is apparent that success in the development and implementation of these programmes depends on: political will; commitment to finance the programme. Financing can come from the international donor community, local finance institutions (e.g. commercial banks and development finance institutions); willingness to make financial and human resource contributions to and participate in the programme by beneficiary firms; partnership with a development partner to offer technical assistance and other support; and a dedicated implementation unit/organisation with adequate human and financial resources and is preferably autonomous.

Another issue is that although the Industrial Development Policy is a sound policy, it does not cover all aspects of industrial development. Some instruments of industrial policy such as the Special Economic Zones Development Programme and the Cluster Development Programme are addressed in different policy documents.

On the one hand, the Special Economic Zones Policy's main objective is to facilitate the establishment of special economic zones which are envisaged to promote the development of manufactured exports thereby affording an opportunity for SMME development. On the other hand, Cluster Development Programme envisages taking advantage of existing comparative advantage in promoting economic diversification. This also presents an opportunity for SMME development. It is clear from this distinction that the Special Economic Zones Development Programme and Cluster Development Programme could both be used to drive the industrial policy. This calls for coordination in their implementation and that of the industrial policy.

Last but not least, priority sectors seem not to be aligned across the various implementing organisations. For example, the priority sectors identified in the Cluster Development Programme are not the same as those identified in the revised NES. According to NDP11, priority sectors under the Cluster Development Programme include diamonds, beef, tourism, financial services, and mining as well as education and health services. Conversely, those identified under the revised NES include arts and crafts, garments and textiles, jewellery and semi-precious stones, leather and leather products, meat and meat products, light manufacturing and the indigenous product sector. These discrepancies may compromise the speed at which industrialization can be achieved.

3.6 National Trade Policy

The 2009 National Trade Policy has 12 objectives, 10 of which can be considered to have a direct effect on the manufacturing sector. The objectives focus on the following: industrial development and economic diversification with the participation of citizen-owned and foreign-owned firms; improving international competitiveness; export-led growth resulting in full employment of labour and other resources; integration into the world trading economy at the regional and multilateral levels; and export-led growth with environmental sustainability. Other objectives include: increased market access through bilateral, regional and multilateral trade agreements and elimination of tariffs and non-tariff barriers; growth of local enterprises through provision of trade information; promotion of export-orientation and improvements in competitiveness; and increased effectiveness of trade facilitation instruments and standards.

Botswana government addresses competitiveness through the Doing Business Roadmap. This roadmap is discussed in detail later in this chapter. Initiatives in the Doing Business Roadmap are at different stages of implementation and various stakeholders have raised a concern at the slow implementation progress. To address competitiveness, especially in the manufacturing sector, the pace of implementation of the roadmap should be hastened.

With regard to the objective on export led growth, the limited export contribution of the non-mining sectors, the deficient diversification of the export basket and high unemployment suggest that success has been meagre. Mineral exports are the exception.

On the objective to integrate Botswana into the world trading economy at the regional and multilateral levels, and to increase market access through bilateral, regional and multilateral trade agreements, there has been partial achievement. Botswana is signatory to several trade agreements among them the World Trade Organisation (WTO), European Union-Southern African Development Community Economic Partnership Agreement (EU-SADC EPA), the Southern African Customs Union (SACU), East African Community-Common Market for Eastern and Southern Africa-SADC FTA (EAC-COMESA-SADC TFTA), and the African Continental Free Trade Area (AfCFTA).

Success in improved market access for Botswana exports driven by these trade agreements has been limited. SACU and SADC remain major markets for Botswana's non-traditional exports. The trade agreements have resulted in notable tariff decline including for manufactured products. In spite of this, Non-Tariff Measures (NTMs) could undermine the use of trade agreements to achieve integration and increased market access.

Unless NTMs are addressed, opportunities presented by bilateral, regional and international markets could yield limited success. Initiatives aimed at enhancing provision of trade information include Global Expos, the launch and operationalisation of the trade portal and trade shows. They expose companies to the regional and international markets. Results from this study show that only 9.9 percent of the firms that were surveyed exported their products.

The limited participation of local manufacturing firms in regional and international markets suggests that trade information may not be sufficient to enhance the competitiveness of exporting firms and should be accompanied by a wide range of initiatives that enhance exporter capabilities and competitiveness.

Regarding trade facilitation, the World Bank's Logistics Performance Index (LPI) Reports, record improvements in Botswana's LPI ranking from 68 in 2012 to 54 in 2016. This improvement in trade facilitation suggests that efforts to address constraints related to trade facilitation have achieved some success. A critical area that needs urgent attention is automation of all border agencies to reduce clearance times. To ensure improved coordination for the implementation of the Agreement on Trade Facilitation, Botswana government has drawn a Trade Facilitation Roadmap (2019- 2023). If implemented as planned, the roadmap is likely to address existing trade facilitation constraints.

3.7 National Export Strategy (NES)

The aim of Botswana's 2010-2016 National Export Strategy (NES) was to achieve global competitiveness through: expansion of existing exports beyond current levels; introduction of new export products; and diversification of the export base.

The Botswana NES (2019-2024) draws some lessons from the way the first NES was implemented: first, despite implementation of export development initiatives, growth and diversification of exports was limited and low quality products persisted; secondly, improving trade facilitation efficiency was partially achieved since the turnaround time for business registration reduced from 14 days to five days; thirdly, progress in the automation of a customs management system and the review of trade facilitation related rules and regulations were slow.

As a result, targets relating to the reduction in border clearance times were not achieved; and finally, the objective on provision of full service advisory and support programmes to the business sector in principal markets, and that relating to identification of niche products and markets were not achieved. The biggest constraint for Botswana relates to the timely implementation of policies, programmes and strategies. Furthermore, recent policies, strategies and plans have inbuilt monitoring and evaluation (M&E) systems but collecting relevant data to facilitate the monitoring aspect and conducting timely evaluations has not been widely adopted.

The overall objective of the NES (2019-2024) has not been changed. Focus sectors include arts and crafts, garments and textiles, jewellery and semi-precious stones, leather and leather products, meat and meat products, light manufacturing, indigenous products and services. NES (2019-2014) has identified seven key lessons from the previous NES successes and failures and among them are an integrated approach to implementation, institutional support, and measurable results. NES (2019-2024) has an M&E system so mechanisms to collect relevant data for monitoring and evaluation purposes should be put in place to avoid implementation constraints experienced in the previous NES.

Study respondents pointed to a mismatch between existing infrastructure and the identified priority sectors. They noted that good logistics solutions are a significant determinant of success in the export of time-sensitive products. They emphasised that effective logistics infrastructure should be developed together with relevant advisory and business support services for existing exporters and export-ready firms.

3.8 Industrial Development Act

The Industrial Development Act was enacted in 1988 and its aim is to regulate industrial development in the country. The Act establishes a licensing committee which issues manufacturing licences to small and medium enterprises. The committee has power to suspend or cancel licences.

The Act also provides for the establishment of an Industrial Licensing Authority responsible for the issuance of manufacturing licences to large enterprises.

It contains a provision for the reservation of certain industries for citizens and these include: manufacture of school uniforms; manufacture of school furniture; manufacture of burglar bars; manufacture of protective clothing; milling of sorghum; manufacture of cement bricks and baked earth (mud) bricks; baking of bread and confectionery; manufacture of peanut butter; bottling of water; production of sour milk; packaging and manufacture of floor polish; manufacture of traditional leather products; manufacture of traditional crafts; signage including electronic signage; fencing materials excluding gum poles; manufacture of candles; ice making; and meat processing. Licensing issues were not identified as constraints to manufacturing sector development during the enterprise survey undertaken during this study. However, approval of manufacturing licences is subject to compliance with building control regulations.

During in-depth interviews with stakeholders, it emerged that some licensing requirements particularly those relating to building control were onerous. For example, building control regulations often expect enterprises to meet requirements that may not have a bearing on health and safety concerns (e.g. tiles on bathroom walls) associated with operations and caused undue delays in the issuing of licenses.

Stakeholders also indicated that the introduction of an Online Business Registration System (OBRS) by the Companies and Intellectual Property Authority (CIPA) had reduced business registration from 14 days to 1 day. Stakeholders highlighted that reforms on the licensing aspects of the doing business environment will contribute to the improvement of the manufacturing sector competitiveness. Against this backdrop, it is recommended that government should undertake an assessment of the regulatory environment within which the manufacturing SMMEs operate so as to reduce the regulatory burden faced by SMMEs. It is further recommended that licensing requirements should, without compromising safety, health and environmental regulations, be customised to the type of business that is being licensed to avoid undue delays.

While the reservation of some manufacturing licenses for locals has stimulated manufacturing activity, it appears growth in manufacturing activity has not been commensurate with improvements in product quality.

Poor quality of locally produced goods has been consistently identified as a constraint to manufacturing sector development. This has also impeded local manufacturers' access to markets both locally and abroad. Study respondents have suggested an introduction of retailer-led supplier development programmes to address product quality and supply constraints. For example, Woolworths has introduced a retailer-led supplier development initiative.

The United Nations Development Programme (UNDP) led supplier development programme was also launched in Botswana in 2018 and is being rolled out. The UNDP supplier development programme focuses on the five sectors of mining, agro-processing, textiles, leather, and infrastructure projects. Supplier development programmes targeted at manufacturing firms could enhance market access for the manufacturing sector.

Study results show lack of certification as a major challenge. This suggests poor product quality. Only 23.4 percent of the establishments interviewed for this study had BOBS certification while the other 76.6 percent did not. Only 5.5 percent of the firms had an internationally recognized certificate and the rest did not. The issue with regard to the adoption and maintenance of product quality standards requires a coordinated response from both standards setting agencies, SMME development institutions, the private sector and institutions responsible for the enforcement of standards.

3.9 African Growth and Opportunity Act (AGOA) National Response Strategy

The Ministry of Investment, Trade and Industry (MITI) developed a National AGOA Response Strategy in 2016. The objectives of the strategy are to: advice Botswana government on how to take advantage of AGOA; increase Botswana's exports under AGOA through identification of policy responses in targeted sectors and capacity building for existing and potential exporters; develop a public and private sector consultative mechanism; and attract investment in identified sectors. Priority sectors under this strategy are: handicrafts; horticulture and agro-processing; jewellery and semi-precious stones; leather and leather products; natural (indigenous) products; meat and meat products; and textiles/apparel.

The Southern African Trade Hub (SATH) highlighted several activities regarding the implementation of the AGOA National Response Strategy. Firstly, the Trade Hub has partnered with the Botswana Investment and Trade Centre (BITC) to facilitate implementation of the AGOA National Response Strategy. The Trade Hub also highlighted that of the seven sectors identified as priority sectors in the Strategy, the Hub has focused attention on two value chains which have the greatest potential. These are: high value-low volume speciality foods value chain (an aspect of natural/indigenous products) such as dried nuts, moringa, morula, etc.; and the textiles and clothing value chain (with a specific focus on work wear/uniforms).

Secondly, the National Response Strategy implementation activities include assessment of export ready firms on aspects such as the production of AGOA eligible products, current and potential production capacity, and whether the firm has certified its products.

During stakeholder interviews, it emerged that inadequate skills, low production capacity of firms, efficiency constraints and the high costs of production, in particular labour and utilities, have plagued the manufacturing sector in Botswana.

Other constraints included limited implementation of quality standards with particular emphasis on food safety standards, and a lack of affordable trade finance. These factors are likely to be among the most important determinants of the utilisation of AGOA.

The issue of quality standards consistently features as one of the most important determinants of market access so it should be of particular importance to exporting firms. As discussed earlier, a coordinated approach to standards and certification is more likely to achieve desired results. It is recommended that an assessment of the institutional framework of standards development and the state of standards and certification infrastructure in Botswana be carried out. It is also recommended that an analysis of the role of standards and certification on exporting and export-ready firms be conducted.

The study is likely to disentangle all the costs associated and other obstacles that exporting/potential exporters face. A detailed analysis of constraints associated with meeting standards and certification requirements in export markets would help with the identification of targeted interventions. ITC (2016) indicates that firms that are integrated in international value chains tend to perform better in terms of meeting quality standards and regulations.

Stakeholder interviews corroborate this view as they observed that Botswana firms which were part of well-developed value chains, for example the motor vehicle parts producers, performed better in terms of productivity and adherence to international standards. However, it should be noted that medium to large firms as the automotive industry requires technical capacities which small, medium and micro firms may not possess.

During in-depth interviews, stakeholders argued that since most SMMEs in Botswana were not part of an established value chain, they existed in isolation and did not benefit from technological development and transfer associated with established value chains.

The SADC Industrialisation Strategy calls for member states to enhance Standards, Quality Assurance Metrology (SQAM) and Sanitary Phytosanitary (SPS) programmes; monitor compliance with standards; and development of capacity building, public education and awareness programmes for SMMEs. During stakeholder interviews, progress on these could not be established.

3.10 Doing Business Roadmap and Action Plan

The Doing Business Roadmap and Action Plan contains short, medium and long-term measures that the Government of Botswana could implement to improve the business environment within which firms operate. Botswana has recorded a substantial steady deterioration in the Ease of Doing Business ranking between 2016 and 2019, dropping from a rank of 72 to 86. Based on the budget allocation for the 2017/2018 and 2018/2019 financial years, the Government of Botswana is undoubtedly committed to the Doing Business reforms.

However, there are concerns that implementation of some reforms have been slow. Doing Business indicators that need attention are: starting a business; getting electricity; and enforcing contracts. Addressing these indicators would improve the environment within which manufacturing businesses operate.

3.11 The SADC Industrialisation Strategy and Roadmap

The SADC Industrialisation Strategy is based on three pillars: industrialisation as a champion for economic and technological transformation; firm, industry, country and regional level competitiveness as a vehicle to move from comparative advantage to competitive advantage; and regional integration and geography as the context for industrial development and economic prosperity. The Strategy goals are both quantitative and qualitative. In terms of the quantitative goal, the strategy envisages substantial quantitative shifts in industrial structure, manufacturing, production, exports, particularly those in the medium and high-technology categories while doubling industrial employment. With regard to the qualitative goal, the strategy aspires for socio-economic transformation both at the national and regional level.

The Industrialisation Strategy Roadmap details challenges, interventions, objectives, programmes/projects/activities priority thrusts and outcomes/outputs in manufacturing sector SMMEs and three manufacturing-related sectors; agroprocessing, minerals beneficiation, and pharmaceuticals production.

During stakeholder interviews, it emerged that institutions were aware of the SADC Industrialisation Strategy and its areas of focus (agro-processing, minerals beneficiation, and pharmaceuticals).

With regard to mineral beneficiation, Botswana has made progress in diamond beneficiation. The Diamond Hub was responsible for the coordination of diamond beneficiation, regulation, licensing and policy development.

While challenges still remain like high costs of production, unavailability of inputs, inadequate local skills for repairs and maintenance, and low productivity; diamond beneficiation has achieved some success in terms of output growth and employment creation. It is not clear whether success achieved in diamond beneficiation can be replicated in other minerals. It emerged during interviews that interventions targeted at transforming SMMEs such as the IUMP had been developed but had not progressed to the implementation stage due to shortage of funds. Interviews also revealed that a UNDP-led Supplier Development Programme (SDP) was recently launched.

However, it was too early to assess its success. Stakeholders envisaged that the SDP was likely to promote the development of the manufacturing sector particularly manufacturing activity in the focus sectors of mining, textiles, agro-processing, textiles, leather and infrastructure.

3.12 National Entrepreneurship Policy for Botswana

The National Entrepreneurship Policy (NEP) was introduced in 2019 to promote entrepreneurship and SMME development, as well as develop sustainable and globally competitive enterprises that will enable achievement of national goals on industrial development, economic diversification, employment creation and poverty eradication. The policy document states that it repeals the 1999 SMME Policy.

The policy has eight specific objectives and all of them contribute towards manufacturing sector development. The policy focus areas outlined are: an enabling regulatory environment for entrepreneurship; entrepreneurship education and skills development; improving access to start-up financing and seed capital; promoting awareness and networking; target economic incentives for SMMEs and entrepreneurship development; and a national entrepreneurship eco-system. The implementation matrix of the NEP outlines initiatives and proposed completion times of the policy focus areas. Since the NEP is a recent development, it is too early to assess its success.

The NEP focus area on the enabling regulatory environment is commendable as it targets an area of concern both at the general operating environment level, as well as the level that is particularly pertinent to manufacturing enterprises. The discussion in the Doing Business Roadmap and Action Plan notes that Doing Business indicators such as starting a business, getting electricity, and enforcing contracts need attention.

It is therefore encouraging that the NEP considers doing business as a policy focus area. Success in the implementation of the NEP will depend on, among other factors, institutional/agency coordination and coherence. Efforts to promote coordination and coherence between institutions and agencies should be intensified to ensure success in the implementation of the NEP.

3.13 Conclusions

The foregoing discussion on the policy environment suggests that policies/strategies/initiatives support the growth of manufacturing sector SMMEs. The challenge lies in the fact that Botswana's manufacturing sector is still at an infancy stage and firms are highly reliant on government financing and business for their survival. The limited productive capacity of these firms hinders them from being able to take advantage of the conducive policy environment in the country. Initiatives such as the SDP are new hence it is early to measure their success.

However, it is envisaged that these are likely to improve technology transfer and market access for SMMEs. More could be achieved in terms of SMME growth and development through a coherent and coordinated approach to the implementation of policies and strategies aimed at supporting SMME development.

CHAPTER 4

The current state of the manufacturing sector in Botswana

In order to come up with appropriate interventions to develop the manufacturing sector, it is important to determine its current status and in particular the characteristics of the manufacturing enterprises and the challenges they face. One of the key constraints faced by SMMEs, including those in the manufacturing sector, is market accessibility both locally and externally.

This chapter, therefore, provides an overview of the current status of Botswana's manufacturing sector. The aim is to provide an understanding of the dynamics of the manufacturing sector. The chapter gives a general overview (the situational analysis) of the enterprises within the sector, an analysis of challenges and opportunities in the domestic and international markets.

The enterprise survey results are key in addressing the current status of the manufacturing sector. The results of the survey are substantiated by FGDs, in-depth interviews and a review of relevant documents.

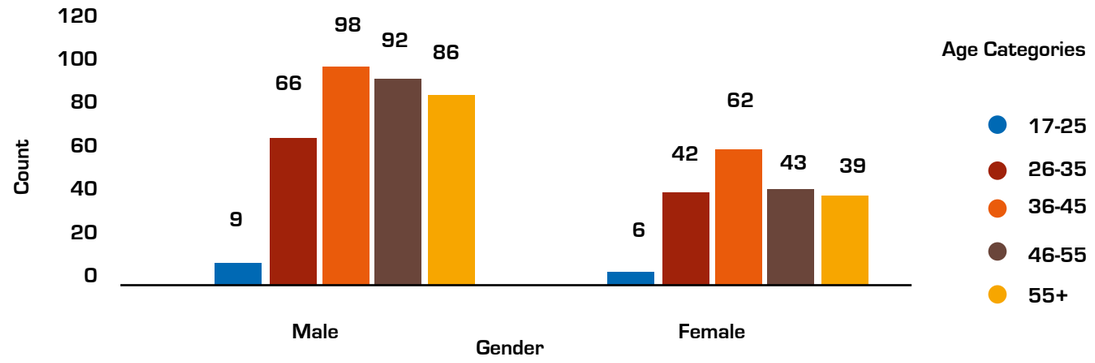
4.1 An Overview of the Manufacturing Enterprises: A Situational Analysis

4.1.1 General Characteristics of the Surveyed Enterprises

The majority (64.5 percent) of the business owners/managers were males. As for age, the youngest respondent was 17, while the oldest was aged 80 and the average age was 45. Age was grouped into the following categories: 17-25, 26-35, 36-45 (middle adults), 46-55 (upper adults) and 56 and over (elderly).

This is not surprising as many people aged 17 to 25 years are still studying and would most likely not participate in other economic activities in large numbers. In addition, people in these age group are likely to have limited personal savings to start a business with or have limited ability to borrow from financial institutions as they do not have collateral or security for loans; a normal requirement from credit offering institutions.

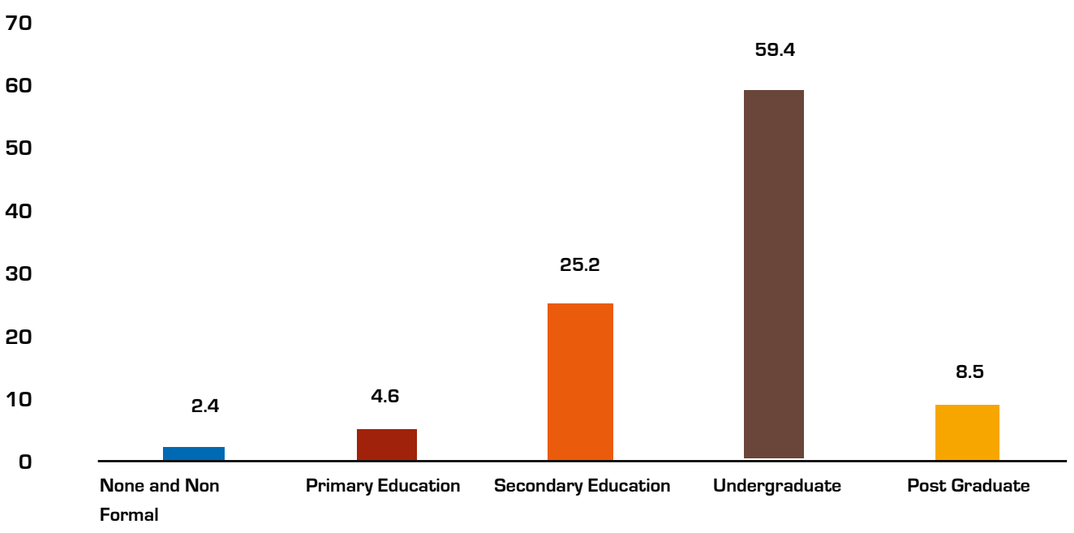
Figure 4.1: Age and Gender of Respondents



Educational attainment is one of the most important variables associated with business success or failure (Chowdhury et al., 2013; Lussier and Pfeifer, 2001; and Yusuf, 1995). In Botswana, Gaetsewe (2018) found that business owners with no formal education are less likely to succeed when compared with those that have some form of education. This is based on the assumption that educated individuals are knowledgeable and skilled which enhances business success.

Figure 4.2 indicates that the level of formal education is very high. Two thirds (67.9 percent) of business owners/managers have tertiary education certification. Of the remainder 25 percent have secondary education, 4.6 percent primary education, and 2.4 percent have no formal education.

Figure 4.2: Education of the Respondents (Percentages)



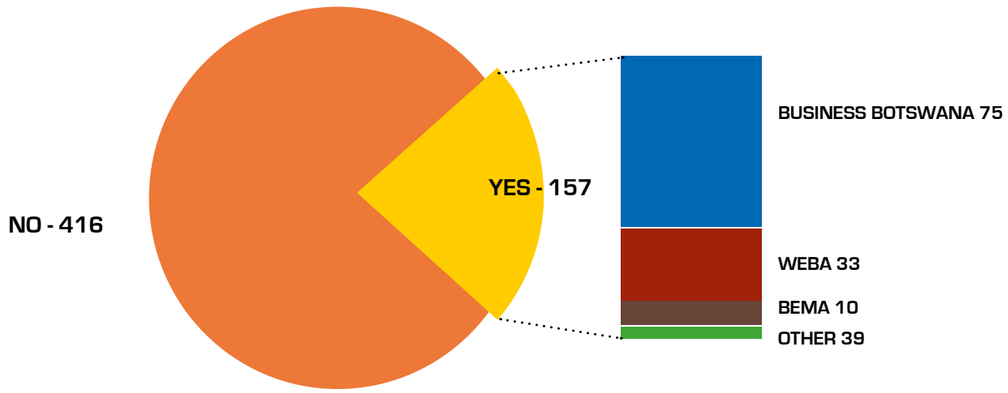
When respondents were asked whether they had formally registered their businesses, an overwhelming majority (86 percent) answered in the affirmative. Only 13 percent indicated that their businesses were not formally registered, while 1 percent were not aware if their firms were registered when they started operating. Nearly all (96.1 percent) firms have registered with CIPA. Just under fifty percent of firms (49.4 percent) were registered with PPADB, 23.9 percent were registered for EDD and 14 percent with the Department of Industrial Affairs in the Ministry of Investment Trade and Industry. Firms registered with these institutions enjoy benefits such as preferential treatment through public procurement and participation in bidding for government tenders.

Membership of business associations can play a significant role in assisting in funding, increasing business networks, benchmarking, and advocacy for a conducive operating environment. However, the survey found that, only 125 (23.1 percent) of the firms belonged to a business association in 2018.

Of these 75 (60 percent), 33 (26 percent), and 10 (8 percent) were members of Business Botswana, Botswana Exporters and Manufacturers Association (BEMA), and Women in Business Association (WEBA) respectively (Figure 4.3). Of these 39 (31 percent) of the firms were also members of sector associations e.g. Botswana Textile Association, Botswana Dairy Association, and Botswana Diamond Manufacturers Association.

Of the 416 (76.9 percent) who were not members of any business association the majority (53.2 percent) were micro enterprises, followed by small businesses (35 percent), medium enterprises (9.4 percent) and large enterprises (1.2 percent). It is clear that the majority of businesses, especially micro enterprises do not see the benefit of being members of business associations, perhaps because the associations are not strong enough in lobbying for their members.

Figure 4.3: Membership of Business/Industry Association



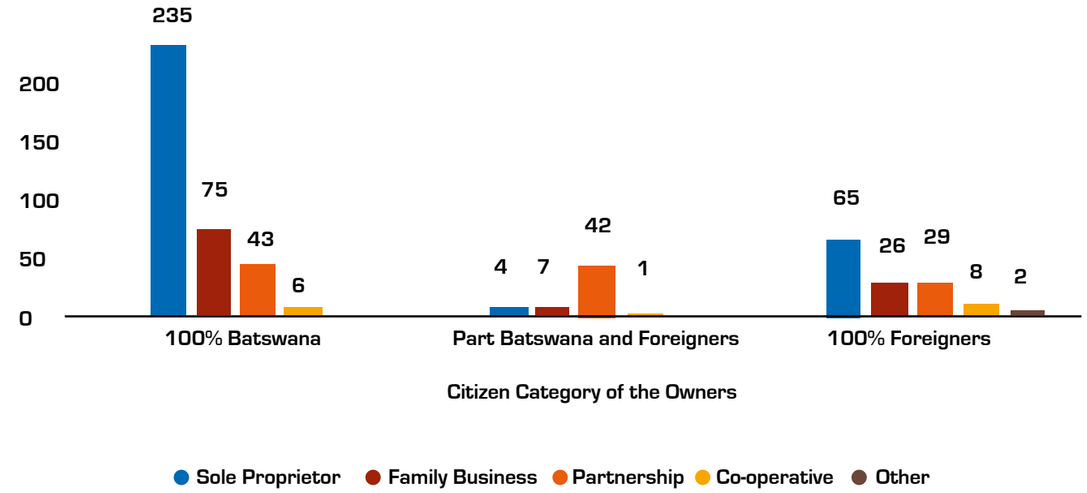
On average, firms in the manufacturing sector have been operating for about 12 years. The firm that has been in operation the longest has been in business for 50 years. Table 4.1 shows that 14 percent of firms have been in operation for 3 years or less, while the majority of firms (31.3 percent) have been in operation for between 11-20 years.

Table 4.1: Years of operation in Categories

Number of years	Frequency	Percent
3 years and below	75	14
4-10 years	208	38.7
11-20 years	168	31.3
21-30 years	63	11.7
31 years and above	23	4.3
Total	**537**	**100**

Figure 4.4 shows the ownership structure and citizenship status of the owners/managers of the manufacturing firms. Nearly two thirds (66 percent or 359) of firms are owned/managed by Botswana citizens, and the majority (65.4 percent) are sole proprietors, followed by family owned firms (20.8 percent). Of the remainder 130 firms are owned by foreign nationals and half are sole proprietors. Lastly, 54 firms are jointly owned by Batswana and foreigners and as expected a large proportion of these firms (77.7 percent) are partnerships.

Figure 4.4: Ownership Structure and Citizenship



When asked if they had any other branches elsewhere beside the main one, 101(18.6 percent) firms answered in the affirmative. More than 73 percent of those that have branches indicated that they own 2 branches and the remaining 27 percent own 3 to 9 branches. Most firms (47) have their branches in different districts from where the main branch is located, whilst 39 firms have branches in the same district as the main branch. Only 15 firms indicated that they had branches outside Botswana. The dominant reasons for having more than one branch were to bring the product close to market (77 percent) and to increase production in order to meet market demand (73 percent).

4.1.2 Business Performance and Financing

4.1.2.1 Employment Creation

The manufacturing sector has been identified as one of the key sectors that can assist in economic diversification and job creation. The 2018 Formal Sector Employment Survey indicates that the manufacturing sector generated 37, 860 (9.2 percent of total formal employment) formal jobs (Statistics Botswana, 2018a). The current enterprise survey indicates that the sampled businesses employed a total of 10, 886 and 10, 864 employees in 2017 and 2018 respectively. This translates to an average of 20 employees per business.

Figure 4.5 shows growth changes in employment from 2017 to 2018. The number of employees did not change for most firms (53 percent) in the sector, 22 percent of the firms experienced a decline in the number of employees and 25 percent of the firms had an increase in the number of employees.

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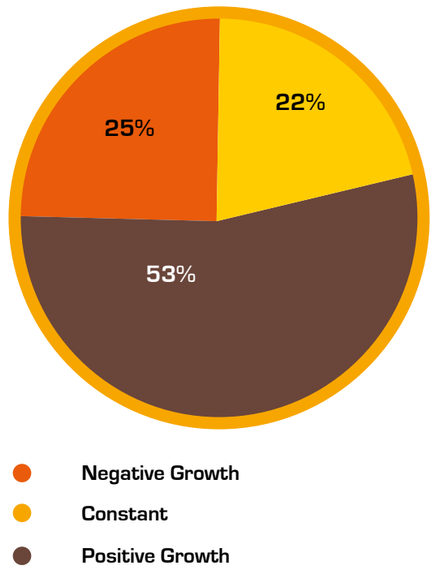
Figure 4.5: Employment Growth (Percentages)



The survey results show that, using the number of employees as a criterion for classification, in 2017 the majority (44 percent) of the firms were micro enterprises, followed by small (38.4 percent), medium (14.2 percent) and large enterprises (3.4 percent). In 2018 the majority (46.6 percent) of enterprises were still micro, followed by small (37 percent), medium (13.1 percent) and large (3.3 percent). This reinforces the dominance of micro enterprises in the manufacturing sector.

4.1.2.2 Income Generation

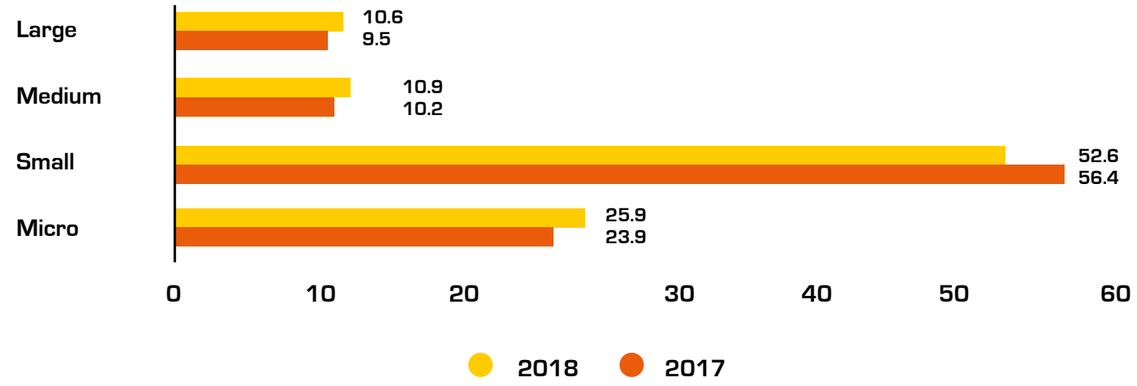
A vibrant manufacturing sector plays an important role in maintaining a globally competitive and innovative economy. According to Statistics Botswana (2018b), the manufacturing sector contributed 5 percent to Botswana's GDP in 2017.

The performance of a business is usually measured by turnover (sales revenue) and profits made by the firm. This gives an indication of the success and survival of a business.

To further assess the manufacturing sector's contribution, the respondents were requested to share their enterprises' turnover and profit for 2017 and 2018 so as to analyse their performance.

The minimum and maximum turnover in 2017 was P5,000 and P440 million, while in 2018 it was P3,600 and P480 million. In accordance with the National Entrepreneurship Policy definition and using turnover as a criterion for classification, the analysis shows that most manufacturing firms were small (56.4 percent) in 2017, followed by micro (23.9 percent), medium (10.2 percent) and large enterprises at 9.5 percent. Similarly, in 2018, most manufacturing firms were also small (52.6 percent) followed by micro with 25.9 percent and medium at 10.9 percent.

Figure 4.6: Turnover for 2017 and 2018 (Percentages)



In addition, business performance is computed by the difference between 2018 and 2017 turnover and profits as shown in Table 4.2. The survey results show that the majority of firms had a positive growth for both turnover (57.8 percent) and profits (53.5 percent). However, a sizeable proportion (over 33 percent) had negative growth in terms of both turnover and profits between 2017 and 2018.

Table 4.2: Performance of Firms - Turnover and Profits

Performance	Turnover (%)	Profit (%)
Negative Growth	33.3	35.4
Constant	8.9	11.1
Positive Growth	57.8	53.5

When respondents were asked to describe their businesses' performance in the last financial year, 51 percent of the business owners/managers perceived that their businesses were growing, 24 percent perceived their business to be stagnant and 25 percent perceived a decline in their business performance. Of those who perceived their businesses to be growing, the majority were small (56.4 percent), followed by micro (17.8 percent), medium (13.6 percent) and large enterprises at 12.3 percent (Table 4.3).

Table 4.3: Firm Perceptions on Performance (Percentages)

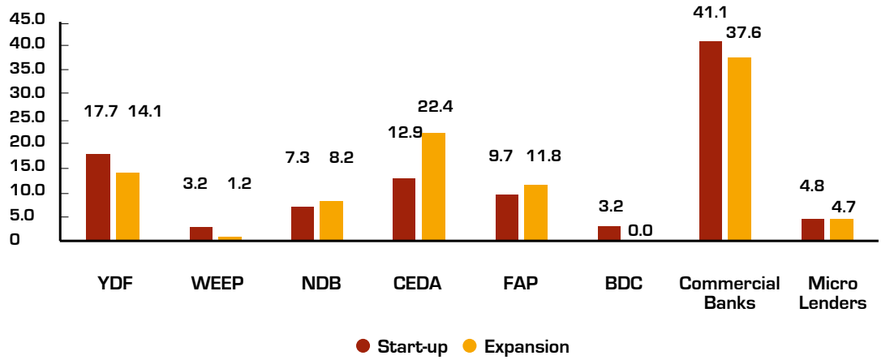
Performance	Micro	Small	Medium	Large
Growing	17.8	56.4	13.6	12.3
Stagnant	28.6	50.9	8.9	11.6
Declining	39.7	46.6	7.8	6

Respondents were asked about determinants of business performance and most of those who perceived growth in their business stated the main reason as access to funding (88.9 percent), followed by access to raw materials (78.9 percent), technological expertise (73.8 percent) and access to markets (24 percent). Other reasons for business growth included advertising, diversification of products and increased market especially provided through government procurement. Those who perceived a decline in business performance stated the main reason as lack of access to market (58.2 percent), followed by lack of funding (20 percent), lack of access to raw materials (10.6 percent) and lack of technological expertise (7.6 percent).

4.1.2.3 Business Funding

Access to finance is one of the key elements for business success for both start-up and business expansion especially in manufacturing due to the high capital intensity of the sector. The survey results revealed that an overwhelming majority (87.1 percent) of the enterprises were self/family funded at start-up, and only 12.9 percent were funded by financial institutions. Of those that sourced funding from financing institutions, the majority (41.1 percent) got funding from commercial banks, followed by YDF (17.7 percent) and CEDA (12.9 percent), (Figure 4.7).

Figure 4.7: Sources of Funding (Percentages)

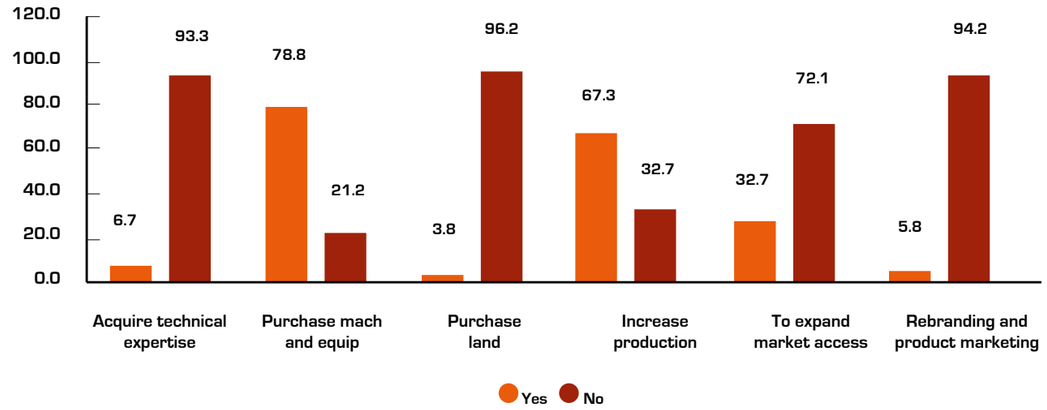


For business expansion the financing dynamics change, financing institutions are the most common sources of funding. It was revealed that 76.6 percent of the surveyed enterprises sourced funds from financing institutions, while only 23.4 percent were self/family sponsored. Common sources of funding from financing institutions are commercial banks (37.5 percent), CEDA (22.4 percent) and YDF (14.1 percent). Other sources of funding that the sector used are WEEP, NDB, FAP, and microfinance institutions. The respondents indicated that they mainly use expansion funding to purchase machinery (78.8 percent) and to increase production (67.3 percent) as shown in Figure 4.8.

It is important to note that CEDA was established to provide funds for citizen entrepreneurs at subsidised interest rates especially for those that could not access commercial bank credit because of their high risk appetite. However, the results of the survey indicate that most businesses used their own resources to finance their businesses, followed by commercial banks. A plausible explanation for this might be that the majority of businesses are not conversant with the business plan development required by CEDA and other financing institutions, while those that used commercial banks might have obtained funds as personal loans. Another plausible explanation for the high number of businesses that are self-financed and the low proportion getting CEDA loans is that, owing to the high failure rate of absentee owners for CEDA financed businesses, the Agency now requires the promoters to be full-time managers of their businesses. This has meant that a high number of potential employed entrepreneurs have now resorted to personal loans to finance their enterprises.

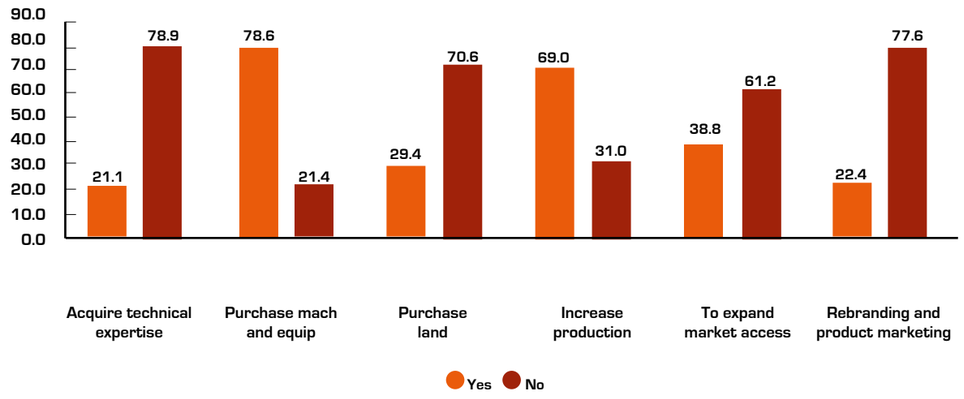
This is the case because it is easy to obtain a substantial amount of an unsecured personal loan from commercial banks.

Figure 4.8: Uses of Funds for Expansion (Percentages)



It is important to establish whether firms currently require funding and which areas they would like to expand if the funding was provided. Survey results showed that 71.2 percent of the enterprises needed more funding and the majority said they would use it to purchase machinery and equipment (78.6 percent) and increasing production (69 percent) as shown in Figure 4.9.

Figure 4.9: Areas of Businesses Expansion (Percentages)

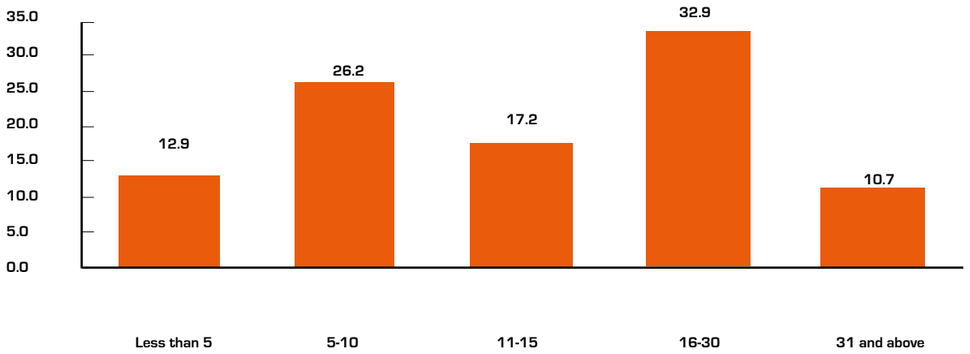


4.1.3 Human Capital Development

Business owners/managers were asked whether they had the relevant qualifications and experience in the type of manufacturing activity they were doing. The results show that an overwhelming majority (97 percent) of the respondents indicated that they had the relevant experience and 59.7 percent had the relevant qualifications which are aligned with their business operations.

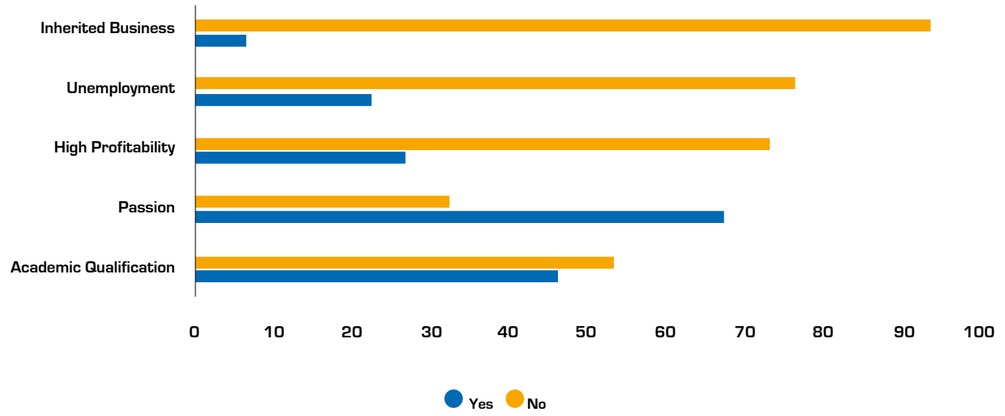
Respondents were requested to indicate how many years of experience they had in the businesses they were undertaking and the results indicated that 39.1 percent had less than 10 years' experience in the industry, while the majority (60.9 percent) had more than 10 years' experience.

Figure 4.10: Years of Experience in the Business (Percentage)



Owners/managers were further asked to indicate the reasons for starting this type of business (Figure 4.11). Of these, 67.5 percent indicated that it was a passion, 45.9 percent said it was in line with their academic qualifications, followed by high profitability (26.8 percent), unemployment (23.1 percent) and inherited the business (6.7 percent).

Figure 4.11: Motivation for Starting Business (Percentage)

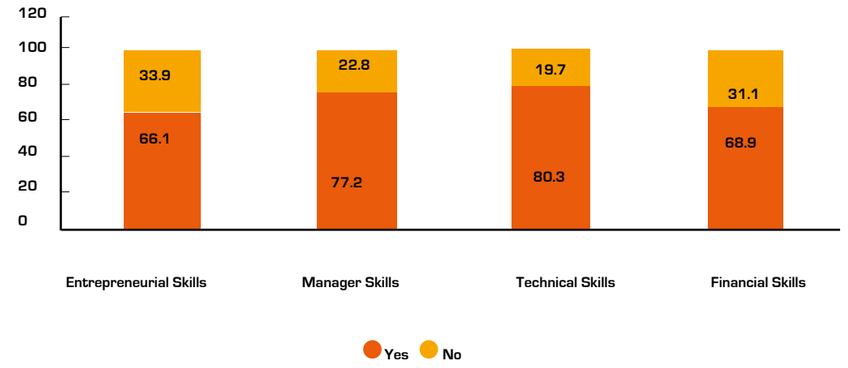


The skills that an owner/manager possess are very important for business success. When asked to indicate which skills they had, 80.3 percent of the respondents indicated that they had the technical skills, 77.2 percent had the managerial skills, 68.9 percent had the financial skills, and 66.1 percent possessed entrepreneurial skills (Figure 4.12).

However, there were still managers/owners who indicated that they lacked some skills. The skill which was most lacking was financial expertise (36.5 percent), followed by business (26.5 percent), technical (20.6 percent) and managerial expertise 17.5 percent.

Respondents also indicated that they received in house training at institutions they worked for as well as BITC, BNPC and Business Botswana.

Figure 4.12: Training of Managers/Owners (Percentage)



Furthermore, investigations were done to identify where manufacturing firms got the necessary skills to operate their businesses. The survey results show that most managers/owners received their skills from tertiary institutions while some are self-taught.

Table 4.4: Source of Training

Owner Training	CEDA	LEA	HRDC	Tertiary	Government	Self-taught
Entrepreneurship	3.4	9.3	0.6	66.2	3.9	16.6
Managerial	4.8	9.5	1.7	76.6	4.3	3.0
Technical Skills	2.5	4.4	1.0	57.8	3.5	30.8
Financial	3.9	9.2	0.7	58.2	3.2	24.8

Employees are vital in any business and it is important that they have proper skills in order to be productive. Respondents were asked about the skills that the employees had been trained on and 85.6 percent were trained on technical skills, followed by managerial skills (39.8 percent), financial skills (34.1 percent) and entrepreneurial skills (32.2 percent).

Figure 4.13: Employee Training (Percentage)

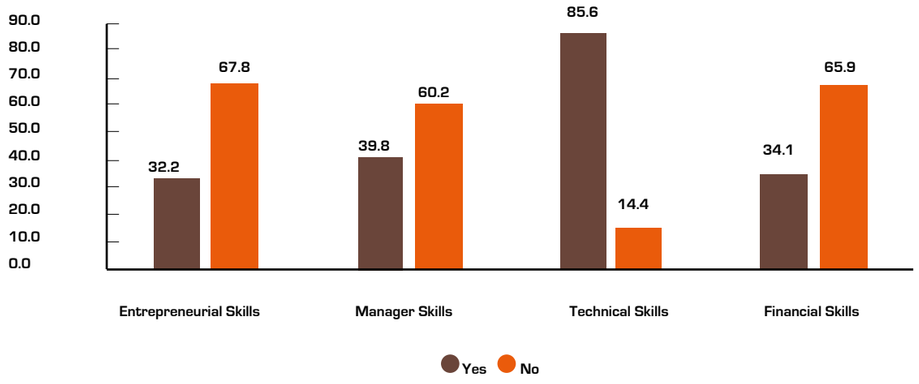


Table 4.5 shows that training of employees seems to be done mostly at tertiary institutions followed by self-taught education. However, survey results show that the percentage of skills and training is low with comparison to managers/owners. Respondents also highlighted that their employees received on the job training as well as training from institutions such as BITC, BNPC and Business Botswana.

Table 4.5: Source of Training for Employees

Employee Training	CEDA	LEA	HRDC	Tertiary	Government	Self-Taught
Entrepreneurship Sills	0,8	4,9	3,3	74,8	1,6	14,6
Managerial Skills	0,0	5,5	3,4	74,7	2,7	13,7
Technical Skills	0,4	1,1	2,1	53,9	1,8	40,8
Financial Skills	0,0	3,9	3,9	80,3	3,1	8,7

4.2 An Overview of Local and International Market Access

4.2.1 Assessment of Local Market Access for the Manufacturing Sector SMMEs

Access to markets has been identified as one of the important factors for business growth. Access to domestic and international markets plays a crucial role in facilitating the growth of SMMEs. In developing countries, lack of access to markets is a significant impediment for SMME growth. This section reviews market access for manufacturing sector SMMEs. The next sub-section reviews private sector procurement as a source of market access for the manufacturing sector. This is followed by a review of the role of public procurement on manufacturing sector growth.

4.2.1.1 Private Sector Procurement and Market Access for the Manufacturing Sector

The retail sector has the potential to open market access opportunities for the manufacturing sector SMMEs. Supermarket chains have become a dominant market for manufactured products and the rapid expansion of supermarket chains from within the region, notably South Africa into Botswana, has situated supermarkets as a potential significant domestic market for manufacturing sector SMMEs in Botswana (das Nair and Chisoro 2016). Supermarkets are buyer-driven and heavily standards intensive in relation to their suppliers (Marther 2005, Reardon and Hopkins, 2006; Kaplinsky and Morris, 2018). Suppliers are required to be able to meet both private and public standards/regulations in order to remain in the supply chain. Traceability, standards certification, and supplier audits impose costs and additional resource utilisation on suppliers' operations down the supply chain. This forces those who can meet them into upgrading their operational competitiveness, but also has severe negative impacts on smaller enterprises and farmers who are unable to do so, effectively excluding them from these supermarkets driven value chains across the globe (Kaplinsky and Morris 2018). The positive and especially the negative impact of supermarkets on suppliers' capabilities, small scale food processors and some SMME manufacturers, in Southern Africa (South Africa, Botswana, Zambia and Zimbabwe) has recently been highlighted (das Nair and Chisoro 2016; das Nair et al 2018).

In-depth interviews with stakeholders for this study suggest that South African owned retailers operating in Botswana are not limited to the food-processing subsector, but also affect local manufacturing sector SMMEs in general. The interviews also revealed that the system of listing with a supermarket was not only costly but requirements were also viewed as onerous and posed a significant obstacle to the growth and development of manufacturing sector SMMEs.

Stakeholder interviewees also indicated that constraints such as inadequate capability and capacity of SMMEs to produce quality goods, inappropriate technical skills, insufficient business and financial management skills, and brand loyalty for well-established foreign brands further compounded market access constraints for manufacturing SMMEs in Botswana. Further, stakeholders cited poor quality products and inconsistent supply as major impediments faced by local producers of manufactured products in accessing the local retail market. It is recommended that BITC should strengthen the Brand Botswana campaigns, through mindset change programmes that support locally produced products. These campaigns be accompanied by a robust product quality and standards programme for SMMEs.

To enhance market access opportunities for SMMEs, initiatives such as the introduction of retailer-led supplier development programmes and strengthening linkages between SMMEs and large-scale enterprises are possible options. Woolworths recently introduced a retailer-led supplier development initiative to enhance market access for locally produced products. It is too early to evaluate the success of this initiative and the extent of its coverage has not been determined due to lack of relevant information. However, during in-depth interviews, stakeholders strongly supported the retailer-led supplier development programmes and argued that it was likely to contribute positively to enhancing market access for manufacturing sector SMMEs. Stakeholders recommend that retailer-led supplier development programmes of the type adopted by Woolworths be widely introduced by other supermarket chains operating in Botswana.

In South Africa, Marther (2005) found that strengthening the links between franchises and food processors could enhance market access opportunities for SMME food processors given the relatively flexible procurement approaches of franchises. According to Marther (2005), franchises offered assistance in terms of training, equipment purchase, shop fittings and initial production inputs to the franchisees. These initiatives did not only address market access constraints but also tackled product quality and supply constraints. Based on the South African experience, it appears that technical and financial assistance towards product quality improvements and ensuring production facilities of SMMEs satisfy retail standards are essential to facilitate participation of manufacturing SMMEs in the retail sector. It is recommended that CEDA investigates the feasibility of adopting the franchise model of market access and product quality improvements for CEDA-funded manufacturing SMMEs with a view to enhancing market access opportunities of food processing SMMEs.

Based on this study's enterprise survey, market access constraints are not only limited to the retail sector since all respondents cited lack of market access as one of the impediments to growth. Of all the enterprises that were interviewed, 21.2 percent and 9.6 percent reported that lack of market access was a major and severe obstacle respectively, while 11 percent indicated that market access was a moderate obstacle.

Of all the respondents who indicated that they sold their products to the local market, 32.9 percent cited small domestic market as a major challenge, 30.3 percent cited competition from international businesses as an impediment and 18.5 percent indicated that delayed payments or non-payments from buyers was a significant impediment to their operations. Market access issues, specifically those relating to the small size of the domestic market, might be exacerbated by the fact that more than 90 percent of the firms interviewed sold their products locally and only around 10 percent exported their products.

Product quality is one of the integral elements for successful market access and contributes to the enhancement of an enterprise's competitiveness and sustenance of customer satisfaction. Investing in standards and certification enhances a firm's competitiveness and also improves product quality. According to the ITC (2016), compliance with standards facilitates firm entry into niche markets or enhances the firm's position in the value chain. However, there are costs associated with meeting standards and certification. As discussed earlier, product quality is one of the significant determinants of entry and participation in the retail sector market. Poor quality of products places a further constraint on market access. Yet, enterprises interviewed did not regard product quality as a significant growth challenge. In fact, most survey respondents expressed satisfaction with the quality of their products (96.5 percent) and 96.9 percent of the respondents believed their customers were satisfied with the quality of their products. On the contrary, poor quality of products was consistently cited as a major constraint to manufacturing sector SMME growth and development during in-depth interviews with stakeholders. This discrepancy in perception indicates that enterprises are not in touch with their customer/buyers and are operating in a supply chain vacuum rather than working towards upgrading quality and operational competitiveness. In addition, the low level of certification by firms interviewed during the enterprise survey suggests that product quality may be a significant challenge to manufacturing sector growth in Botswana. The enterprise survey results indicate that only 23.4 percent of the establishments had a national standards certification, that is a Botswana Bureau of Standards (BOBS) certification and 76.6 percent did not. BOBS standards adopted by firms ranged from ISO 9000 to ISO 9308.

ISO 9001, a quality management system, is the most extensively implemented quality standard in Botswana. Of the firms that were certified, 44 percent had ISO 9001 certification. The relatively low uptake of quality standards could be due to the costs associated with standards and certification. Enterprise survey results indicate that 23 percent of the enterprises that acquired BOBS certification experienced challenges during certification. The most common certification constraint were delays in assessments by BOBS (50 percent) and high costs of certification (40 percent). Costs of certification include those of acquiring information about relevant standards and regulations, implementation costs associated with possible new investments, and changes in production processes and certification. ITC (2016) estimates that certification costs range from 3,000 to 4,000 Euros (approximately P30, 000 to P40, 000). In addition to costs associated with international quality standards such as ISO 9001, SMMEs targeting the retail sector as a potential market may incur additional costs associated with meeting the private grading system and standards requirements of retailers.

Apart from costs, SMMEs may not have sufficient managerial capacity and capability to adequately acquire information about relevant standards, compliance costs and certification, and administrative procedures associated with compliance and implementation of quality standards. Results of this study's enterprise survey indicate that bureaucratic procedures are one of the most significant barriers to certification as 50 percent of the firms that adopted quality standards cited delays in assessments by BOBS as a major challenge. Where enterprise managerial capacity and capability is inadequate, as is the case with the majority of manufacturing sector SMMEs in Botswana, procedural obstacles associated with the adoption of quality standards are likely to place a further constraint on market access for SMMEs.

Following certification, enterprises incur additional costs for the maintenance of quality standards. For SMMEs these costs may be significant leading to under-investment in standards and certification and which further exacerbates market access constraints faced by SMMEs. SMMEs with funding constraints struggled to maintain quality standards. It emerged during in-depth interviews that some SMMEs that had certified their products deregistered from standards bodies citing high costs of maintaining quality standards. Respondents of the enterprise survey corroborated this view on the high cost of certification. An additional reason for deregistration and low certification is that some enterprises felt that they did not reap any benefits from certification especially when bidding for government tenders.

Given the pervasiveness of quality concerns in manufacturing sector SMMEs, there is an urgent need to accelerate quality and standardisation in Botswana. It is recommended that the Ministry of Investment, Trade and Industry in collaboration with certification bodies such as BOBS, National Food Technology Research Centre (NFTRC), etc. consider introducing a certification programme specifically for SMMEs. The programme could include but not be limited to: guidance and support to SMMEs to enhance international competitiveness; initiatives that address industrial productivity and quality; financial support (e.g. through grants) to SMMEs to facilitate the development of a certification framework; and training programmes on the introduction and maintenance of certification systems. It is recommended that BOBS should accelerate conformity assessments for quality standards and introduce a quality standards and certification pricing scheme adapted for SMMEs needs. This will address the concerns regarding delays in conformity assessments and high costs of certification and maintenance of quality standards.

It emerged during in-depth interviews with stakeholders that institutions responsible for the development of product standards are inadequate. Stakeholders pointed out that though BOBS is responsible for the development of standards, there are other quality control and standards requirements that are dictated by the markets that exporters sell into. These include human and animal health, food safety standards, fair trade, organic certification, etc. Some of these standards may not be mandatory but play a crucial role in the competitiveness of exports. It is also recommended that government, in partnership with the private sector, should invest in the development of product testing and certification laboratories to boost the competitiveness of domestic firms and facilitate their entry into export markets. During interviews, stakeholders indicated that activities of certification bodies and agencies were uncoordinated and this probably exacerbates delays and high costs of certification faced by SMMEs. It is recommended that Government, in collaboration with certification bodies (e.g. BOBS, NFTRC, the Ministry of Agricultural Development and Food Security, etc.) responsible for SMME development, and education and training institutions consider the development of quality support programmes.

Additionally to the retail-led market access initiatives for SMMEs, strengthening linkages between SMMEs and large-scale enterprises enhances their market access opportunities. Initiatives that link SMMEs and large firms such as SDPs have been found to contribute positively to SMME growth and development. This is attained through their effective SMME capacity building. Botswana has recently formalised SDPs and their effect on SMME development has not been established yet. If designed and implemented effectively, SDPs would enhance market access, facilitate technology and skills transfer, and facilitate SMME standards and certification capacities and capabilities. During stakeholder interviews, it emerged that some large enterprises have started implementing some form of SDPs (albeit informal, sporadic and voluntary). Beneficiary SMME firms reported increased market access and enhanced participation in government tenders as large firms had sufficient capacity, human and other resources to handle onerous government procurement requirements.

For other available options to enhance market access for SMMEs, UNIDO (2007) proposes three approaches; export consortia, production cooperatives and quality consortia.

Under export consortia, UNIDO (2007) highlights the following features. First, export consortia are appropriate for SMMEs with considerable production and in some cases export experience. Secondly, as export consortia support access to export markets, human and financial investments to support improvements in product quality and production, technology tends to be considerable. Thirdly, export consortia were suitable for manufacturing (including food processing) and service sectors.

Using the Moroccan six-member apparel sector export consortia as a case study, UNIDO (2007) found that activities such as joint marketing and purchase of production inputs, training and quality certification helped members upgrade their production capacities and enhanced their participation in the European markets.

Production cooperatives as an approach target national and international markets, offer a variety of services including shared production equipment, technical and managerial resources, and logistics (warehouses, transportation to markets, etc.). Collection and dissemination of market information, training in production techniques and product advertising and marketing were found to be suitable for food processors and the handcraft sector (UNIDO, 2007). Based on the experience of a Handicraft Industry Cooperative Society in Kenya, UNIDO (2007) concluded that the network benefitted members in terms of facilitating increased access to lower cost inputs, access to equipped workshops, storage facilities, packaging and logistics services, and increased turnover for cooperative members as a result of joint marketing and export. Quality consortia, targeting both national and international market access, are prevalent in the food sector (e.g. cheese, oil, fruits, vegetables, etc.) and through lobbying for recognition and legal protection, offer product guarantees in terms of origin, characteristics and quality (UNIDO, 2007). UNIDO (2007) uses the San Daniele Ham Consortium as an example of a quality consortium and outlines activities such as an aggressive advertising policy, support for producers through access to higher quality inputs, and links with a quality certification agency to ensure compliance with European standards requirements.

While the SMME market access networks vary in terms of objectives, target sectors and markets, the following conclusions can be drawn from the discussion above. The first is that given the heterogeneous nature of manufacturing SMMEs in Botswana, these market access networks can be adapted to different SMMEs depending on their size and sector. These different forms of market access networks can be combined to ensure success in market access initiatives. To ensure maximum benefits and effectiveness and determine the market access network that best meets SMME needs would require an assessment of different SMME production, marketing and other capabilities. Production cooperatives might be the most suitable option for microenterprises and the handicrafts sector since their focus is on upgrading members' production and marketing capacities. Botswana has already developed a Cooperative Development Strategy. It is recommended that implementation of the strategy be accelerated. Secondly, quality production is a theme that runs across all the market access networks regardless of target sector and markets. Since product quality is integral in facilitating market access, it is imperative that Botswana develops and implements a quality support programme. Finally, collective action in terms of access to quality (and sometimes low costs) inputs is an essential ingredient to ensuring competitiveness in terms of quality.

4.2.1.2 Public Procurement and Market Access for Manufacturing Sector SMMEs

As public procurement constitutes a significant portion of GDP (estimated at 30 percent in developing countries by ITC), it is widely believed that public procurement could stimulate transformation and growth of SMMEs, manufacturing sector included. Some of the initiatives discussed which have the potential to spur SMME sector growth are local content policies and preferential procurement legislation.

Experience in other countries suggests that government procurement has been used to promote industrial development and innovation. UNIDO (2017) gives the following country experiences as examples where public procurement was used to drive industrial development. The first example is India, which introduced a preferential scheme to promote domestically produced manufactured electronic products such as desktop computers, tablets, laptop computers, printers, etc. South Africa is another example and it designated sectors where local content requirements should be applied, while Brazil offered preferential treatment to products made in Brazil.

With regard to SMME promotion, UNIDO (2017) shows that India offered preferential treatment to SMMEs by setting aside 20 percent of the annual value of goods and services for every central government ministry. The report further indicates that the United Kingdom increased SMME access to public procurement through the Small Business Research Initiative, where procurement of a minimum of 2.5 percent of external R&D of every government department was made from SMMEs. In South Korea (UNIDO, 2017) indicates that the country used, among other initiatives, public procurement to support start-ups (less than 5 years) by easing market entry requirements.

The EDD is one instrument that Botswana government has introduced to promote locally produced manufacturing products. Interviews with key stakeholders highlighted that the uptake of the manufacturing aspect of the EDD has been slow. This is partly due to the misinterpretation of the implementation of the EDD. Additionally, respondents indicated that there is no database on locally produced goods which procuring entities could refer to when doing their procurement plans.

The PPAD Act contains provisions for socio-economic development and these provisions have been used to introduce initiatives aimed at meeting certain socio-economic objectives. One such scheme is the local procurement scheme which has provisions that empower specific categories of bidders such as women, youth, and the disabled. However, local procurement schemes have no specific bias towards SMME promotion whether or not they are manufacturing. The SPEDU revitalisation programme states that procuring entities should set aside 30% of their procurement for the SPEDU region. That could be viewed as promoting manufacturing and SMME development in the SPEDU region. However, given its regional bias, the programme cannot be replicated to cover non-SPEDU areas.

It is recommended that procuring entities (public procurement) should develop regulations of the PPAD Act aimed at promoting local manufacturing SMMEs through, among other interventions, reservation/set-asides (designation of a certain portion of the public procurement budget) and preference schemes targeted at locally manufactured products by SMMEs. These interventions should be backed by strong monitoring and enforcement and stringent requirements for granting waiver requests. It also recommended that Government should through the socio-economic provisions of the PPAD Act, enhance local content of manufacturing SMMEs by introducing price preferences for large tenderers/companies that sub-contract a set proportion or form consortiums with SMMEs.

Procurement initiatives introduced in Botswana do not seem to have stimulated manufacturing sector growth and development or improve market access for manufacturing sector SMMEs specifically those who sell their products locally. The enterprise survey indicated that the major buyer of manufacturing products was private individuals (41.6 percent), followed by private enterprises (34 percent) and government (24.4 percent). There could be several reasons why government procurement relative to other markets for manufactured products constitutes a smaller share:

- One possibility is that implementation of the EDD, particularly as it relates to manufacturing, has not performed as expected due to misinterpretation by procuring entities.
- Secondly, interviews with stakeholders highlighted that the invitation to government tenders is inherently biased against the manufacturing sector. Stakeholders highlighted that Invitations to Tender (ITTs) are normally floated for a very short time leaving very little time for manufacturing firms to respond to the tenders. In the short space of time provided, it is difficult for manufacturing firms to adjust production processes and secure raw materials and additional inputs and respond to the tender. It is recommended that procurement entities should set longer time period for submission of tenders on the supply of manufactured products, develop and publish their multi-year procurement plans to enable local manufacturing SMMEs to effectively participate in the public procurement market.
- Third, in-depth interviews revealed that the definition of manufacturing under the EDD initiative included simple packaging. Stakeholders argued that in its current form, the definition and hence the focus of EDD was biased against substantial transformation and high value addition in manufacturing. The stakeholders recommended that the Ministry of Investment, Trade and Industry should review the manufacturing definition used in EDD and consider breaking it down to reflect the different levels of manufacturing. They emphasized that procurement preferences should be skewed in favour of high value addition in manufacturing.
- Fourth, stakeholders expressed concern that the poor quality of manufactured products was a major constraint for the local procurement market access. Stakeholders also indicated that since procuring entities did not reference quality standards in tender documents, there was no incentive for SMMEs that relied on government procurement to certify their products. In addition, firms that initially certified their products have since deregistered since quality certificates were not a major consideration for government procurement. It is, therefore, recommended that procuring entities should at the time of advertising procurement opportunities reference quality standards and include incentives (e.g. preferential treatment) on product quality standards as part of the evaluation criteria.
- Finally, stakeholders considered documentation requirements for public procurement to be onerous for SMMEs. During interviews, some stakeholders revealed that most SMMEs did not respond to invitation to tenders largely due to the difficulties associated with complying with public procurement requirements. It is recommended that ITT requirements, while upholding established standards, should be simplified to enable the participation of SMMEs in public procurement.

Case studies of public procurement being used for industrial development discussed earlier suggest that if properly designed, implemented and monitored, programmes that use government procurement to promote market access for the manufacturing sector SMMEs in Botswana could be considered. In South Africa, the government considered the establishment of a National Procurement Portal to address poor access to markets and improve information accessibility about procurement opportunities and streamline procurement opportunities to reduce the administrative burden for SMMEs (Rogerson, 2013). It is recommended that Botswana government should consider the establishment of a National Procurement Portal to not only address market access constraints, but also information asymmetry particularly for SMMEs. In South Korea, government introduced a Quality Management Office charged with the responsibility of quality management of procured goods (UNIDO, 2017). UNIDO notes that the quality of products procured improved significantly as a result of the establishment of the office. To address concerns regarding poor product quality Botswana could consider the establishment of a similar office at PPADB.

4.2.2 Constraints to International Market Access

4.2.2.1 Assessment of Market Access and Impediments for Export-Oriented Firms

Market access opportunities for Botswana exports are provided by trade agreements that Botswana is signatory to. These include the Southern African Customs Union (SACU), Southern African Development Community Free Trade Area (SADC-FTA), the Common Market for Eastern and Southern Africa (COMESA) - East African Community (EAC) - SADC Tripartite FTA, European Union-SADC Economic Partnership Agreement, and the recently ratified African Continental Free Trade Area (AfCFTA). The African Growth and Opportunity Act (AGOA), a unilateral preferential agreement between the United States of America and African countries also provide additional market access opportunities for Botswana's manufactured products.

4.2.2.2 Market Access in SACU

As a member of SACU, Botswana's exports to SACU member states are duty free. Botswana's manufactured exports to SACU include: salt; lime and cement; inorganic chemicals, animal vaccines, plastics and articles of plastics; textiles and clothing; articles of leather; wood and articles of wood; paper and paperboard; and motor-vehicles parts. NTMs in SACU may be a major determinant of market access for Botswana exports. The 2015 SACU Trade Policy Review identifies several measures affecting imports into South Africa.

The first is import control measures on live plants and animals and products thereof, drugs and narcotics. Imports of controlled goods may be subjected to phytosanitary measures. Second, South Africa also applies technical regulations on agricultural remedies, farm fees, fertiliser, fruits, vegetables, red meat and poultry, dairy products, grains, canned meat, processed fruits and vegetables, organically produced products, foodstuffs, medicines and medical devices. Technical regulations are applied to both imports and South Africa produced goods. Other products subjected to technical regulations include automotive products, electrical and electronic equipment and personal protective items.

Second, imports of animal, plants and food products to South Africa have to comply with sanitary and phytosanitary requirements. Imports of meat product have to meet additional import requirements relating to slaughtering procedures and abattoirs in their country of origin (exporting country). Finally, imported products (as well as domestic products) are subjected to marking, labelling and packaging requirements. Other SACU countries apply non-tariff measures such as import levies on milk and dairy products and wheat products to protect infant industries. Imports of food and non-food products of animal origin as well as primary processed foods of animal origin (meat and meat products, milk and milk products), wood packaging material, soil and plant-based handicrafts imported into Eswatini require sanitary and phytosanitary certificates. In Lesotho, imports of milk and other dairy products, livestock and livestock products, medicines, medical devices, drugs and toxic chemicals are subjected to import restrictions. In addition to sanitary and phytosanitary requirements on meat plant and dairy imports, Namibia also requires phytosanitary certificates for primary processed grain products. Food and food products of animal origin probably receive the highest number of SPS and labelling and packaging requirements. Handicrafts are also subjected to technical non-tariff measures. While technical non-tariff measures are justifiable on human health and safety considerations, their prevalence has implications for Botswana existing and potential exports of agro-processing and soil and plant-based handicrafts products.

Third, non-technical and non-tariff measures such as levies and quotas are also widely applied on intra-SACU imports of agro-processed products (e.g. dairy products) on infant industry protection grounds. Although these are likely to contribute to the growth of local agro-processing industries in SACU member countries, these measures also have the potential to thwart the growth of Botswana's agro-processing exports to SACU.

Botswana should strive to meet these health standards and regulations in order to enter world markets as these are requirements in most markets.

4.2.2.3 Market Access in Other Markets

With more than 85 percent of SADC tariff lines at zero, trade liberalisation in SADC, especially in tariff reduction, has enhanced market access opportunities for Botswana exporters. Botswana's manufactured products to SADC are similar to those that go to SACU but also includes exports of products such as soap. However, one of the most significant constraints to market access for Botswana exports to the SADC region are NTMs. Preferential access to the SADC market provided for under the SADC-FTA is subject to rules of origin. For a product to benefit from originating status under the SADC Protocol on Rules of Origin, it must satisfy three criteria: wholly produced in a member country (for agricultural products); change in tariff heading as a result of processing of non-originating materials; and non-originating materials (inputs) must have undergone substantial transformation/processing in one or more of the member states. While literature (e.g. Southern Africa Trade Hub, 2011) suggests that the private sector finds rules of origin restrictive, enterprise survey results suggest contrarily that rules of origin may not be a major impediment to regional trade for Botswana exporters. Out of the 54 exporters that participated in the enterprise survey, only 7.4 percent and 5.6 percent of the exporters found rules of origin as a moderate and severe constraint respectively. It could be that most of Botswana's exporters to SADC do not use SADC-FTA preferential tariff rates. It seems plausible that Botswana exporters do not utilise SADC preferential rates as 63 percent of the respondents indicated that rules of origin were not a constraint.

Technical NTMs such as sanitary and phytosanitary standards and other technical requirements are widely applied in SADC for health and safety considerations. Non-technical NTMs are also applied by some countries. For example, the 2017 Trade Policy Review indicates that Mozambique applies pre-shipment inspection requirements on imports of flour, cooking oil, cement and chemical products, pharmaceutical products, and cosmetics regardless of their country of origin. In addition to labelling and/or safety requirements on pre-packaged products, cement and pesticides, imports of pesticides also require a permit.

From the discussion on NTMs in SADC, it appears technical regulations and safety standards are heaviest on food processing. From the enterprise survey, only 13 percent and 14.9 percent of respondents considered technical requirements (labelling and packaging) and quality control measures a significant challenge to exporting respectively. While agro-processing has been cited in several policy documents as a priority sector, only a few of the exporting firms interviewed exported processed food products hence the relatively less importance of technical regulations and safety requirements on exports.

Broader trade facilitation issues including inefficient transport systems, border procedures and logistics may also be a major determinant of market access for Botswana exporters.

With the exception of South Africa and Mauritius, SADC countries scored very low on trade facilitation indicators. The World Bank Doing Business Report ranked Zambia 152nd (out of 189 countries) and Malawi, 170th on the trading across borders indicator in 2016. Mozambique ranked 129th in 2015. If trade facilitation constraints are not addressed, they are likely to be an important impediment to intra-regional trade.

With a membership of 26 African countries from the COMESA, EAC and SADC regions, 57 percent and 58 percent of the African continent's population and GDP respectively, and liberalisation of up to 80 percent of product tariff lines, the TFTA presents market access prospects for Botswana exporters. It appears that benefits associated with market access opportunities of the TFTA would be in the medium to long-term. This is because negotiations on tariff schedules and rules of origin annexes are still outstanding. The 2019 EAC Trade Policy Review summarizes the common external tariff as follows. The simple average tariff for animals and animal products is 22.6 percent; 11.8 percent for oil seeds, fats, oils and their products; 13.4 percent for wood, pulp, paper and furniture; 25.3 percent for clothing; and 12.9 percent for leather and leather products.

It is evident that tariffs are highest on animal products and clothing. The prospect of Botswana exporters of these products entering the EAC market outside preferential rates may be undermined by their high levels of protection. TFTA member states also use technical, sanitary and phytosanitary regulations on the imports of animal products.

Botswana exports to the EU enjoy duty free, quota free status under the EU-SADC EPA. The single transformation and culmination (where producers from the EU, SADC and ACP member states jointly meet transformation requirements) provisions of the Rules of Origin can foster manufacturing sector growth and development. However, market access potential offered by the EU-SADC EPA may be undermined by the extensive use of SPS and technical barriers to trade by the EU. According to the UCTAD TRAINS data, a total of 97 SPS measures, 263 technical barriers to trade, and 33 quality control measures are in force in the EU.

AGOA is a non-reciprocal unilateral trade preference scheme offering qualifying exports from Sub-Saharan African countries duty-free access into the United States (US) for the period 2015 to September 2025. A total of 6,400 product lines are eligible for duty-free access into the US market.

The AGOA Extension and Enhancement Act of 2015 just like its predecessors contains Third Country Fabric (TCF) provision - a special flexible rule that permits apparel imports from lesser developed beneficiary countries duty-free/quota free access into the US when such apparel is made from fabric imported from non-AGOA beneficiary countries. TFC provisions have been extended to Botswana despite its middle-income status.

During stakeholder interviews it emerged that despite the fact that a National AGOA Response Strategy for Botswana is in place and initiatives thereof at different stages of implementation, the utilisation rate of AGOA was still very low as only a couple of Botswana firms export natural products (e.g. morula products) to the US. Stakeholder interviews suggest that capacity issues for local firms especially those relating to meeting food and drug requirements in the US market are an important factor on the low utilisation of AGOA. The low quality of products is one of the most important constraints to market access both in the domestic and export market.

A significant proportion of firms that served the local market did not certify their products due to, among other constraints, the high costs associated with certification and maintenance of standards. Despite the prevalence of standards in the regional and international export markets reviewed, exporting firms did not consider standards as a major determinant of market entry. There are two possible reasons why this is the case. The first is that the exporting firms interviewed did not export products where standards and certification requirements were stringent.

The second reason is as advanced by ITC (2016) that firms that export tend to be more productive and are more likely to comply with standards and certification requirements. It is evident from the discussion above that utilisation of market access opportunities from the various trade agreements Botswana is signatory to will depend to a large extent on addressing capacity constraints of local producers and a more coordinated response by relevant institutions to address the quality of production.

4.2.2.4 Firm Survey Results on Constraints to International Market Access

In line with the aforementioned constraints faced by export-oriented SMMEs, the survey results reveal that a higher proportion (90 percent) of Botswana's manufacturing firms do not export.

This means that only 10 percent of the interviewed firms are exporters. This is in accordance with the international literature that posits that exporting is rare, owing to potential constraints pertaining to accessing international markets (Wagner, 2007). ITC (2016) attributes these to non-tariff barriers, which are likely to have a negative economic effect on cross-border trade in goods by changing the quantities of goods traded, or prices or both.

According to ITC (2016), the non-tariff barriers can be categorised into technical requirements (labelling, packaging, etc.); conformity assessment (product certification, testing, inspection, etc.); pre-shipment inspections; quality control measures; charges, taxes and price control measures; finance measures; export taxes and charges; licensing or permit to export, etc.). Compared to large firms, SMMEs are likely to find cost compliance with import requirements in the export markets prohibitive.

In what follows, we present evidence from the firm survey on constraints faced by export-oriented SMMEs. Table 4.6 presents the challenges faced by exporters when exporting their goods. Firms were asked to rate the challenges faced according to whether they view them as low, moderate, high, or not applicable to them. Surprisingly on the one hand, the majority (ranging between 48 and 65 percent) of exporting manufacturing firms were of the view that both the tariffs and the non-tariff barriers were not an issue to them (as evidenced by a sizeable proportion of firms that fall in the "not applicable" category).

This evidence may be suggestive of the fact that manufacturing exporters may largely be inclined to export to the SACU region, in particular, South Africa, because of the proximity and the membership in the Southern African Customs Union (SACU). As a member of SACU, Botswana's manufactured products can be exported to South Africa without duty or restriction. Hence, Botswana's exporters may view the South African market as an extension of Botswana's domestic market.

The sizeable proportion of firms that fall in the "not applicable" category may also signal that the quality of Botswana's manufactured exported products may not be at par with the international requirements that dictates compliance with quality standards, pre-shipment inspections, etc. This may consequently result in non-compliance with international standards, suggesting that these exporters are occasional exporters.

On the other hand, there are some exporters that viewed the tariffs and non-tariff barriers as key constraints when they access the export markets. These are exporters who possibly export to international markets.

When focusing solely on the "high" category, Table 4.6 shows that the biggest challenges faced by these exporters are tariffs or customs duty (18.5 percent), followed by delays in pre-shipment inspections (13 percent) and export taxes (13 percent) as well as high fees associated with pre-shipment inspections and clearance (11.1 percent). In light of the thin line that may exist between the "moderate" category and "high" category, we next combined these two categories.

The results are in sync with the earlier ones that the biggest challenges faced by exporters are tariffs or customs duty (35.2 percent), followed by export taxes (27.8 percent), high fees of pre-shipment inspections and clearance (24.1 percent) as well as delays in conformity assessments (20.4 percent).

These costs could serve as a significant impediment to trade for smaller firms and subsequently make it harder for SMMEs to meet the required standards, leading to constrained international market access. Evidence from the ITC NTM Business Surveys confirm that SMMEs are the most negatively affected by exposure to technical regulations as compared to large firms (ITC, 2016).

Table 4.6: Challenges in Exporting Goods

Challenges in exporting of goods	Low	Moderate	High	Not Applicable	Total
Tariffs (customs duty)	16.7	16.7	18.5	48.1	100
Export Taxes	20.4	14.8	13.0	51.9	100
High fees for conformity assessments	24.1	9.3	7.4	59.3	100
Delays in conformity assessments	20.4	11.1	9.3	59.3	100
Technical Requirements (labelling and packaging)	22.2	7.4	5.6	64.8	100
High fees of Pre-shipment inspections and clearance	18.5	13.0	11.1	57.4	100
Delays in pre-shipment inspections	24.1	3.7	13.0	59.3	100
Quality Control measures	20.4	5.6	9.3	64.8	100
Rules (certificate) of origin	24.1	7.4	5.6	63.0	100
Payment delays	31.5	7.4	7.4	53.7	100

It is important to understand where exactly the aforementioned constraints are being experienced. Exporters were, therefore, asked to indicate where they experience these challenges – in the originating country (Botswana), transit country, or destination country.

Table 4.7 presents the results. It is evident that key constraints hindering access to international markets are delays in pre-shipment inspections, rules (certificate) of origin, tariffs (customs duty), delays in conformity assessments as well as issues of quality control measures.

These challenges point to the inherent inefficiencies in the national technical infrastructure alluded to earlier calling for the need for concerted effort by all the relevant stakeholders involved, including BOBS, Botswana Unified Revenue Services (BURS), and the implementing agencies.

Additionally, the significant proportion of firms (55 percent) that have cited tariffs as a key constraint is suggestive of the existence of national regulations designed to protect firms against imports sourced from international markets.

This may pose as a serious challenge, in particular, to exporting firms who need to source intermediate inputs outside of the SACU region to be used in the production of their goods. Access to imported intermediate inputs have been linked to enhanced export destination diversification (Turco and Maggioni, 2013).

Related to constraints that arise from destination countries which are key obstacles to accessing export markets, the results in Table 4.7 depict largely payment delays, technical requirements, and high fees for conformity assessments as well as quality control standards. This is evident that demonstrating compliance as well as meeting the requirements themselves pose as obstacles to international market access.

Table 4.7: Challenges in Exporting Goods by Country

Challenges in exporting of goods	Originating Country (Botswana)	Transit Country	Destination Country	Total
Tariffs (customs duty)	55	15	30	100
High fees for conformity assessments	47	0	53	100
Delays in conformity assessments	53	12	35	100
Technical Requirements (labelling and packaging)	40	0	60	100
High fees of Pre-shipment inspections and clearance	45	22	33	100
Delays in pre-shipment inspections	67	8	25	100
Quality Control measures	50	0	50	100
Rules (certificate) of origin	63	0	37	100
Payment delays	30	0	70	100

4.2.2.5 Export Potential Opportunities

Information sharing on export opportunities is very useful to firms that aspire to export. Using the ITC's export potential map, we show Botswana's products that have the greatest export potential. The results across the various export markets are displayed in Table 4.8, where 1, 2 and 3, show the greatest export potential, greater export potential and great export potential respectively.

The results show that jewellery and precious metal articles, machinery, meat and chemicals are Botswana's manufactured products with export potential. Disaggregating into export regions, the jewellery and precious metal articles is shown to consistently portray the greatest export potential in the whole world, Europe and the Americas.

This is in line with the government's strategy of facilitating beneficiation of the diamond sector, resulting in the jewellery and precious metals articles sector identified as one of the priority sectors in the 2019 NES. On the contrary, machinery and chemicals have the greatest export potential in Africa, including SACU.

While the diamond beneficiation strategy, which includes jewellery manufacturing, cutting and polishing, has a potential to be successful in Botswana, evidence from the stakeholder interviews has revealed that jewellery manufacturing has not really taken off in earnest. The jewellery manufacturing industry requires specialised skills and these skills are in short supply in Botswana. In addition, access to markets could be a potential problem for new entrants in the jewellery industry as they lack established contacts and networks in these export markets.

Table 4.8: Export Potential Opportunities

Products	World	Europe	Americas	Africa	SACU
Jewellery and precious metal articles	1	1	1		
Machinery	2	3	2	1	1
Meat (except poultry)	3	2	3	3	3
Chemicals				2	2

Source: ITC's Export Potential Map

Notes: 1 denotes greatest export potential; 2 denotes greater export potential; and 3 denotes great export potential.

4.3 Conclusions

From the discussion above, it is clear that most manufacturing SMMEs are male owned and the majority of owners/ managers have tertiary education. An overwhelming majority of enterprises had registered their businesses, particularly with CIPA. In terms of business associations memberships, only 23.1 percent indicated that they were members of such associations, suggesting their enterprises do not see the benefits of being members.

On average, each enterprise employed about 20 people in 2017 and 2018. When asked about their financial performance, 51 percent of the interviewed businesses indicated that it had improved, while 24 percent and 25 percent indicated that they had stagnated and declined respectively. The major source of funding for start-ups is self-financing, followed by financial institutions. Of those who sourced their funds for start-ups from financial institutions, the majority indicated that they got finance from commercial banks, followed by YDF and CEDA.

This is despite the fact that CEDA was created mainly to finance start-up businesses. The reason for this might be that many business owners feel that the lending requirements at CEDA are cumbersome. In addition, business owners who reported that they used commercial banks to finance their start-up might in fact have obtained personal loans and used them to finance their business as these are easy to obtain especially if someone is employed.

The buyer-driven nature of retail supermarkets and their qualification requirements tend to be a significant impediment to market access for Botswana's manufacturing sector SMMEs. Initiatives to address these constraints include technical and financial support to manufacturing sector SMMEs to enable their participation in retail markets.

The Woolworths retailer-led programme is a good example of how retailers can facilitate market access for SMMEs and should be replicated to cover other retailers. Poor quality products have exacerbated market access constraints faced by SMMEs, the government should consider the introduction of quality support programmes for SMMEs, address the shortage of testing and certification laboratories and related capacity constraints.

The potential of government procurement as a tool to promote industrial development in general and manufacturing sector SMME growth is undermined by inconsistencies in the implementation of the EDD initiative and definitions of the manufacturing sector, the lack of regard for quality and product certification in public procurement, and cumbersome documentation requirements for SMMEs. These need to be addressed to improve the effectiveness of government procurement as an industrial development tool.

CHAPTER 5

Key constraints to development of a robust and competitive SMME led manufacturing sector

Apart from access to markets, both local and international, SMMEs face a number of constraints that hinder their competitiveness and eventually their survival. This chapter identifies constraints faced by SMMEs that hinder their competitiveness and the mitigation measures that could be undertaken to overcome the identified constraints.

The chapter first discusses key success factors for robust and competitive SMMEs. SMMEs may face certain constraints in their operations and some of these constraints may be market and/or policy-related challenges. The constraints may also be due to infrastructural bottlenecks and limited uptake of technology as well as an unskilled labour force. The identified constraints are informed by findings from the enterprise survey, FGDs, in-depth interviews and relevant documents.

These constraints include an assessment of productive output as well as human capital, infrastructure and technological requirements.

5.1 Key Success Factors for Robust and Competitive SMMEs

Before identifying key constraints that hinder the development of a robust and competitive SMME-led manufacturing sector in Botswana, we first discuss key success factors geared towards a robust and competitive SMME sector.

According to ITC (2016), one possible methodology that focuses on microeconomic drivers is to use the SMME competitiveness grid, which is characterised into three levels (firm capabilities, immediate business environment, and national environment) as well as three pillars; compete, connect, and change. Related to the three levels of SMME competitiveness, the "firm capabilities" level includes indicators that assess whether firms follow best practices such as possession of a bank account and using emails in their daily operations.

The "immediate business environment" level covers factors that are external to the firm but still affect firm performance such as access to power and skilled workforce. The third level (the national environment) includes structural factors at the national level such as ease of doing business and infrastructure.

The first pillar of SMME competitiveness (capacity to compete) focuses on the firms daily operations, including their efficiency in terms of quality, quantity, time and cost (ITC, 2016). This includes such factors as the use of internationally recognised quality certificates as well as technical infrastructure available to firms. The "capacity to connect" pillar includes such factors as membership to sector associations and availability of ICT infrastructure. Last but not least, the "capacity to change" pillar gauges the firm's ability to withstand uncertainty associated with market forces. This will include such factors as the firms' ability to interpret evolving market trends.

Given the foregoing, it is thus generally accepted that adhering to quality standards plays a key role in connecting firms to end markets – both local and international. This is because of the competitive edge that comes with firms complying to standards and regulations, leading to enhanced entry into markets. Notwithstanding this, complying with standards and regulations comes with increased cost of production for the firms. Thus, SMMEs are likely to complain about regulatory or procedural obstacles to trade as they are less competitive relative to larger firms and will therefore find the additional compliance costs unaffordable. These costs include amongst other things; implementation costs, certification costs and procedural costs associated with proving compliance. For exporters, these costs may lead to an increase in the price of the exported product rendering it uncompetitive and this may cause restrained access to foreign markets.

Although certification and standards are an important aspect of SMME development and preparation for export readiness, evidence from stakeholder interviews suggests that Botswana's SMMEs may not be ready to compete in the global markets. First, it is not mandatory for government procuring entities to reference product standards when floating tenders.

Procuring entities are limited in their capacity to enforce standards. Secondly, the definition of manufacturing adopted from the Industrial Development Act by the Ministry of Investment, Trade and Industry (MITI) emphasises simple packaging and simple processes rather than substantial transformation of a product and, therefore, there is no specific bias towards supporting substantial transformation manufacturing activities, through for example incentives and other support.

This in essence is not consistent with trade agreements that Botswana is signatory to and hence is likely to undermine efforts to use trade agreements to develop an export-oriented manufacturing sector.

For example, within the Rules of Origin (RoOs) system there is a requirement for local transformation to add value to the goods. As such, in most trade agreements substantial transformation, change in tariff heading and local content are some of the criteria used for manufacturing products to qualify for preferential market access. In order to verify compliance with such requirements, participating firms may incur additional costs associated with changing their procurement methods as well as administrative costs (Hayakawa et al, 2014).

5.2 Key Constraints

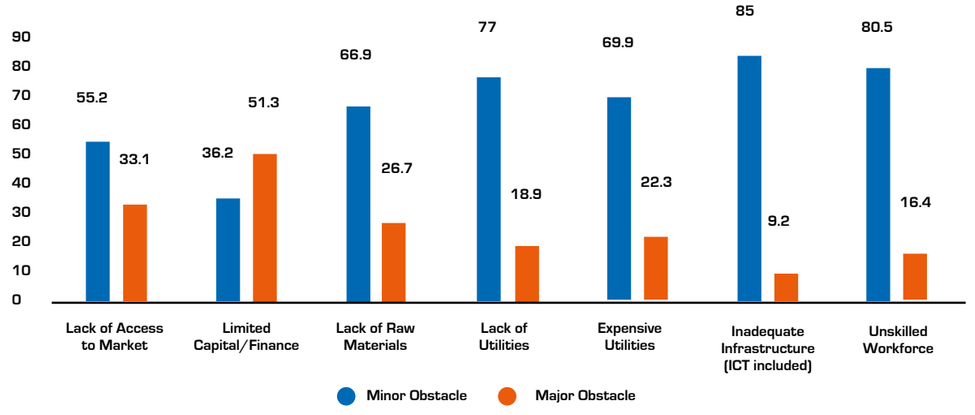
5.2.1 Access to Finance

Firms require finance to start and/or expand their operations. Access to finance facilitates the development of new products, introduction of new processes and investment in human resources needed to successfully manage business operations.

Access to finance has been identified as a major constraint to SMME development in Botswana (World Bank, 2010). The World Bank report indicates that 40.7 percent of manufacturing firms considered limited capital/finance as a significant impediment to their development.

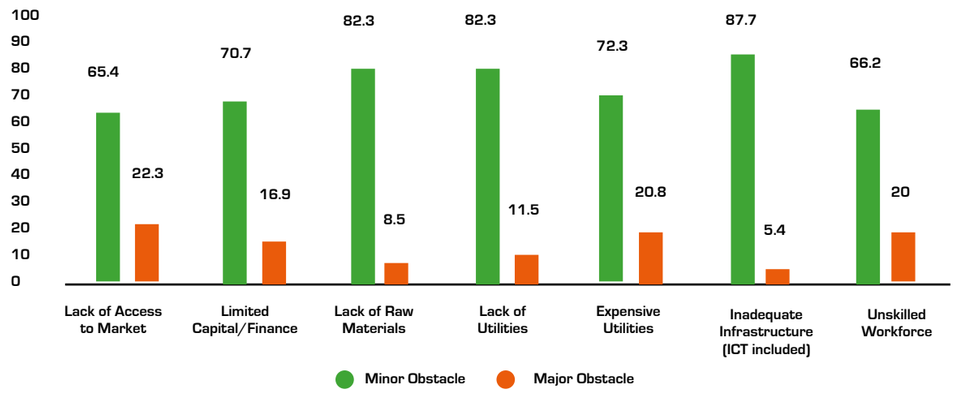
The enterprise survey also looked at constraints faced by citizen manufacturers and the results are presented in Figure 5.1. The most severe constraint faced by citizen manufacturers is limited capital, lack of market access, lack of raw materials and expensive utilities.

Figure 5.1: Production Constraints Faced by Citizens (percentages)



For non-citizen manufacturing enterprises, the major production constraint they face is limited capital followed by lack of market access and lack of raw materials as depicted in Figure 5.2.

Figure 5.2: Production Constraints Faced by Non-Citizens (percentages)



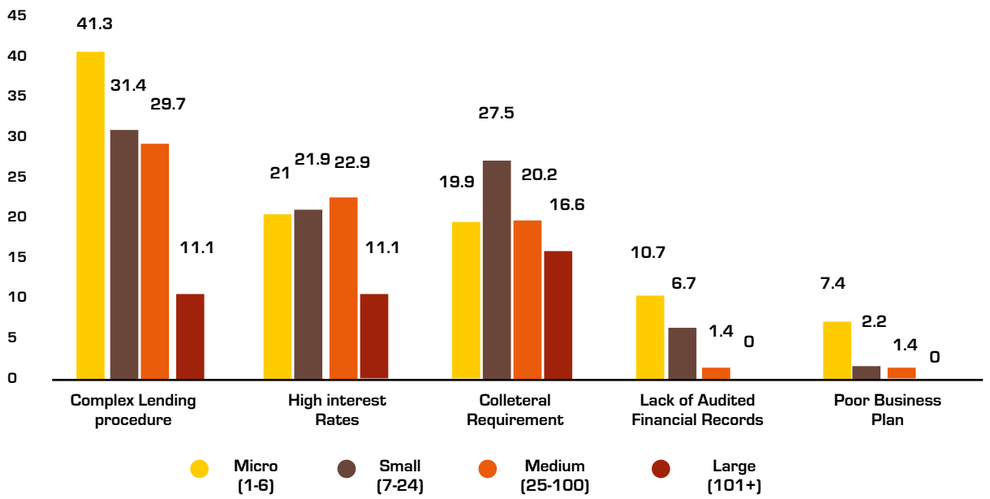
Furthermore, we analysed the severity of these constraints by firm size. From the enterprise survey we observed that lack of access to market is equally perceived as a major obstacle across all categories of the firms, whereas limited capital/finance is a significant (52.4 percent) constraint for micro enterprises. Similarly, limited capital/finance has been cited as one of the major production constraints. For medium and large firms, the most limiting production constraints are expensive utilities followed by unskilled labour force.

There are several factors that hinder accessibility to finance by firms. These include among others complex lending procedures, high interest rates and collateral requirements (see Figure 5.3). From the enterprise survey, several challenges were mentioned as constraints to finance access Figure 5.3 shows these constraints and magnitude by firm size.

As shown, for micro firms the most binding constraint is complex lending procedures, followed by collateral requirements and high interest rates. Similarly, for small enterprises, complex lending procedures, followed by collateral requirement and high interest rates have been reported as the main constraint in accessing finance.

For medium enterprises the most binding constraint is complex lending procedures followed by high interest rates and collateral requirements, while for large firms the most binding constraint is collateral requirements, followed by complex lending procedures and high interest rates. As indicated at Figure 5.3, the size of the enterprise is related to the magnitude of constraints faced by firms when trying to access finance.

Figure 5.3: Challenges Experienced When Sourcing Funding (Percentage)



From these results, it is apparent that the smaller the firm, the larger the magnitude of challenges they face. Results of focus group discussions also corroborate these survey results.

Respondents suggest that financing provided by CEDA only partially met their needs; and that collateral requirements may also be onerous and exacerbate manufacturing sector financing constraints. OECD (2016) established that collateral regimes which entail a range of options in terms of allowable collateral including movable collateral have facilitated the provision of loans to SMEs.

One of the good examples of needs-based SMME finance cited in the literature is the model adopted by Turkish SMME development organisation - KOSGEB. OECD (2016) highlights the following with regard to the Turkish SMME development organisation. First, the organisation, in co-operation with commercial banks, offers credit interest support for SMMEs and the loans from commercial banks that KOSGEB supports finance several SMME needs including working capital, exports and investment development, expansions and energy management projects.

According to the OECD (2016), the diversification of SMME financial products is consistent with international best practice where SMMEs are offered a wide variety of loan types with varying maturity, size, rates and collateral requirements. In-depth interviews for this study revealed that loans provided by CEDA did not adequately cover production-related costs such as quality and certification and marketing aspects of SMMEs.

CEDA has recently introduced pre-project financing to cater for pre-production financing requirements of SMMEs such as costs of environmental impact assessments and other costs associated with pre-project financing to address some of the concerns raised by stakeholders. It is recommended that CEDA investigates the feasibility of adopting the Turkish model of SMME needs-based diversified financial products to improve access to finance for SMMEs.

The second area of focus of the Turkish SMME development organisation is the establishment, in partnership with the Council of Higher Education, of a dedicated SMME e-learning facility that promotes financial literacy among SMMEs. SMMEs tend to have inadequate capacity to analyse different financing options and understand complex loan application procedures due to low levels of financial literacy (World Bank, 2010).

This places a further constraint on SMMEs access to finance. It is recommended that CEDA strengthens its business advisory services to include the development of financial literacy programmes (delivered through, for example, new forms of distance learning e.g. e-training) for SMMEs in collaboration with training institutions and universities.

Discussions with stakeholders also identified the lack of affordable trade finance for SMMEs engaged in international trade as one of the major impediments faced by manufacturing firms.

Stakeholders argued that while trade finance may be one of the products offered by commercial banks, access may be limited by associated costs and for SMMEs these costs may be prohibitive.

It is recommended that an assessment be carried that identifies and investigates barriers on trade finance for SMMEs engaged in international trade. It should cover specific challenges and possible solutions.

5.2.2 Human Capital

Human capital is vital for enterprise growth and survival. Skills possessed by both the entrepreneur and employees are crucial for business success. Across manufacturing, value creation relies upon the technical know-how and expert knowledge of individuals, so the development of both technical and soft skills is equally important. Capacity development of the existing workforce and fresh graduates from training institutions is imperative.

The lack of skilled workers is perceived to be a major obstacle in the manufacturing sector in Botswana. Through FGDs, manufacturers indicated that local training institutions do not offer industry related courses, i.e. local institutions do not produce qualified employees with the right technical skills.

Stakeholder interviews also indicated that shortage of relevant skills is a major challenge faced by the manufacturing sector. In the diamond beneficiation subsector, stakeholders cited inadequate local skills for; cutting and polishing; repairs and maintenance of diamond cutting and polishing machinery and equipment; and jewellery manufacturing in the country. In view of the fierce competition from well-established diamond cutters and polishers in India and China, the shortage of diamond beneficiation-related skills coupled with low productivity presented a major challenge for the competitiveness of the local industry.

Stakeholders highlighted that discussions on the possibility of setting up a diamond cutting and polishing school were in progress. In an effort to address the skills shortage challenge, BITC has collaborated with local training institutions and developed a training course to address capacity constraints of local exporters/export-ready firms. From discussions with stakeholders, it is clear that a comprehensive approach to skills development for the manufacturing sector should be adopted.

Pertaining to business and management skills, the enterprise survey revealed that around 97 percent of business owners had relevant experience and 59.7 percent had relevant qualifications for the activities they were doing. Whether this is actually the case or just their subjective viewpoint is a moot point as a significant proportion of them need upskilling to enhance their operational capabilities to meet challenges of the new global competitive order.

Some managers/owners admitted that they lacked some skills; financial expertise (36.5 percent), business, technical and managerial expertise at 26.5 percent, 20.6 percent and 17.5 percent respectively. According to enterprise survey results, smaller firms faced the greatest challenges with regard to human capital.

Out of the 142 establishments that cited lack of business expertise as a constraint, 59.2 percent were micro enterprises, 33.8 percent small and 7 percent medium. Of the firms that found technical expertise a constraint to their operations, 48.7 percent were micro enterprises, 41.3 percent small and 10 percent, were medium sized. For enterprises that cited lack of financial expertise as an impediment, 60.9 percent were small micro enterprises, while 33.5 percent and 5.6 percent were small and medium-sized firms respectively.

With regard to managerial expertise, 58 percent of micro enterprises, 33.4 percent of small firms and 8.6 percent of medium-sized firms considered the lack of managerial skills as a major constraint. From enterprise survey results, it is apparent that the smaller the firm, the greater the human capital constraints. According to the 2010 International Finance Corporation (IFC) report, inadequate business and management skills can exacerbate constraints on access to finance experienced by SMMEs. According to the report, this is due to limited business and management skills of managers/owners to analyse different financing options and address complex loan application procedures.

5.2.3 Infrastructure

Industrial success rests on secure and stable access to infrastructure. Access to infrastructure, especially energy and water, contribute to increased cost efficiencies in manufacturing. However, for firms in Botswana, in most instances, it is not a question of access but of costs. As seen from the enterprise survey, 77.3 percent of the respondents identified lack of utilities as a minor constraint to production. The majority of entrepreneurs had power connection (98 percent) and water connection (97.4 percent). However, the cost of utilities was a constraint to production, 22.3 percent of firms identified high cost of utilities as a major constraint. Small and micro enterprises bear the most brunt of the high cost of utilities; of the 111 SMMEs that identified the high costs of utilities as a major constraint, 46.9 percent were micro, 37.8 percent small and 15.3 percent were medium-sized. Interactions with manufacturers through focus group discussions reiterated that expensive utilities are an obstacle to business growth in Botswana.

5.2.4 Other Infrastructure

A well-functioning technical infrastructure is important for connecting SMMEs to regional and global markets. However, compliance to standards is not without costs and these costs will largely depend on the effectiveness of the national technical infrastructure which is interlinked to various processes and national institutions that define standards and regulations and conduct conformity assessment (ITC, 2016). Inefficiency by any institution will weaken the whole national technical infrastructure. To this end, to maintain a well-functioning technical infrastructure, there is a need for political will. In contrast, evidence from the firm survey and stakeholder interviews points to an inadequate national technical infrastructure.

Roles of institutions making up the national technical infrastructure are uncoordinated and not clearly spelt out. There is need to craft a well-defined national strategy for how these institutions work together to support SMME compliance with standards and regulations.

5.2.4.1 Adherence to Quality Standards

Manufacturing firms should adhere to quality standards in their production processes to ensure that they are competitive and profitable both in the local and international markets. Botswana Bureau of Standards (BOBS) is tasked the promotion and maintenance of standardisation and quality assurance. However, survey results show that only 12 percent of the SMMEs had the BOBS quality certificates. These quality certificates ranged from ISO9000 to ISO 9308.

Furthermore, only 5 percent of the SMMEs indicated that they had other internationally recognized quality certifications. These are very low levels of certification given the importance of quality assurance in any business. Manufacturers in Botswana identified delays in assessments by BOBS and exorbitant prices as main challenges when getting BOBS certificates. These results have been substantiated by FGDs as manufacturers emphasised that it is difficult to satisfy BOBS standards. The latter point implies that some firms need assistance to meet BOBS standards and attain certification.

5.2.4.2 Negligence of Standards and Regulations

Botswana's manufacturing sector is still in infancy and thus hinders the development of value chains which usually require the presence of mature industries. Some industries within the manufacturing sector such as fresh and processed food and chemicals face more regulations or standards than others (ITC, 2016). This is attributed to growing consumer concerns about food safety and quality and environmental protection. Given the high standards needed in the food industry, NFTRC provides technical support services, whereby clients are assisted with technical information such as adherence to specific standards, both local and international.

However, stakeholder interviews revealed that there are no compelling regulations for testing food safety in the country. These are currently voluntary. As an institution charged with the responsibility of generating food technologies, NFTRC is not yet accredited to certify food products for exports. As a result, export firms end up using South Africa laboratories for this purpose.

5.2.5 Technological Advancements

Firms acquire new technology to improve production. UNCTAD (2005) distinguishes between industrial technology and information and communication technology and indicates that both technologies are crucial technologies for SMME development.

UNCTAD (2005) indicates that industrial technology contributes to productivity and product quality improvements while information and communication technology enhances SMME access to global markets. Manufacturing competitiveness depends on the firm's ability to embrace innovation and technology as this maximises product quality, improves productivity and reduces production costs. Therefore, the role of technology in the manufacturing sector cannot be overemphasised.

Regarding industrial technology, the literature notes that countries such as Indonesia and Mauritius implemented a wide range of programmes and services to address the limited technological capabilities of their SMMEs. UNCTAD (2005) cites some of the strategies adopted by Indonesia and these include the SMME cluster programme, establishment of technology centres, a "technopreneur" programme, technology incubation, promotion of entrepreneurship, and help in seeking venture capital. These initiatives were undertaken in collaboration with technology development and research institutions, universities and other relevant institutions.

For its initiative, Mauritius established technology/business incubators, technology service centres, clothing technology centres, subsector clusters (ICT, footwear and textiles) to enhance its SMME competitiveness (UNCTAD, 2005). CEDA should leverage existing partnerships; for example the Development Bank of Southern Africa (DBSA); University Challenge so as to strengthen links with universities, technology development and research institutions; and other stakeholders such as government departments responsible for formulation of technology development policies to promote SMME technology development. Since initiatives such as cluster development have already been planned for by the government, it is recommended that they be accelerated.

The technological complexity of manufactured exports is captured by the share of medium-high technology products in total manufactured trade (UNIDO, 2012). A high share of medium-high technology products in total exports implies that the country is moving towards the manufacture of more advanced products and enhancing its dynamism in terms of exports.

World Development Indicators data indicate that Botswana high technology exports (as a share in manufactured exports), increased from 37 percent in 2013 to 40 percent in 2016. The positive performance could be driven by the dominance of the high technology diamond cutting and polishing exports, and to some extent motor vehicle parts exports in recent years, rather than a more general move towards advanced manufactured export products.

It is unlikely that there has been a general move towards the manufacture of advanced exports since stakeholders cited use of obsolete equipment and machinery and general inefficiencies in production as some of the main constraints to manufacturing sector growth in Botswana.

In addition, enterprise survey results suggest that firms considered the level of technology in Botswana's manufacturing sector to be moderate, with 51 firms indicating so. Only 27 percent of the entrepreneurs indicated that they use high technology in their production process.

Botswana government developed the IUMP to address the lack of sophistication of products and production processes. However, stakeholders reported that implementation of the IUMP has stalled due to lack of funds. As is the case in many developing countries, implementation of the IUMP is not likely to drive firms to technological frontiers or create original inventions.

What it is likely to achieve, however, is to facilitate the process for SMMEs to acquire, diffuse and master technology. This could spur product and process innovation. Given the benefits of IUMP implementation, which include upgrade in technology and improved SMME competitiveness, it is recommended that government should identify and analyse financing options to facilitate it.

With regard to information and communication technology, enterprise survey results suggest that SMMEs in Botswana have embraced the use ICT to among others; access markets for products, source inputs and conduct market and product research. According to the enterprise survey, the majority (85.6 percent) of the businesses perceived ICTs to be a minor obstacle to production.

Clearly most businesses make use of the diverse ICT services in Botswana. The survey shows that about 99.3 percent of the respondents use mobile phones in their businesses. Similarly, over 50 percent of businesses responded to using fixed telephone, email, internet, and social media respectively. The only ICT service that most businesses are still lagging behind in is website utilisation, with only 26 percent of the respondents indicating using a website.

On use of the internet, it is apparent that many manufacturing businesses have taken advantage of its multiple uses, although not exploited to its full extent. Two thirds of the entrepreneurs (66.4 percent) use the internet to communicate with suppliers or buyers. About 52.2 percent of the respondents indicated that they use internet to market the business and carryout research on new products and/or services.

Furthermore, 45.6 percent of respondents said they use internet to make purchases whereas only 34.1 percent of them indicated that they use it to deliver products to clients.

Despite improvements in ICT infrastructure and broadband connectivity, interviews with stakeholders suggest that ICT infrastructure in Botswana has not been adequately developed. Stakeholders further indicated that initiatives such as e-commerce and e-government have not reached their full potential because of inadequacies of the ICT infrastructure (e.g. bandwidth). Stakeholders argued that a well-developed ICT infrastructure would be beneficial to export SMMEs.

Related to inadequacies in ICT infrastructure, the World Bank (2014) cites the high cost of broadband internet as a constraints in ICT use in Botswana. The Global Information Technology Reports indicate that the monthly costs of fixed broadband internet in Botswana declined from PPP$114.48 in 2014 to PPP$73.04 in 2016. Despite this, the cost of broadband internet in Botswana was still higher than that of other countries in the region. For example, in 2016 the monthly costs of broadband internet in South Africa and Lesotho were PPP$30.60 and PPP$23.47 respectively, and in Mauritius was at PPP$42.35.

Consistency in the implementation of measures to address the high cost and quality of internet services is likely to improve uptake of ICT by manufacturing firms and contribute to their competitiveness.

5.2.6 Production Constraints

5.2.6.1 Land

Land, as a factor of production, is one of the key drivers of SMME competitiveness. Access to serviced land plays a major role in SMME visibility, accessibility and subsequently growth of the business. It is worth noting that land can be used as collateral and hence may increase the firm's chances of credit access. This is corroborated by Khanie (2018) who indicated that operating in a fully owned piece of land enhances the probability of accessing credit.

However, access to land remains a major challenge for SMMEs in Botswana. SMMEs are forced to operate from informal setups and where land is available its prices are prohibitive. As seen from the enterprise survey the majority of the SMMEs (76 percent) operated in rented/leased premises, while only 24 percent of them operated on owned premises. Government should, in partnership with the private sector, build industrial parks with subsidised utility costs for small and micro manufacturing enterprises.

5.2.6.2 Access to Raw Materials

Raw materials also play an important role in the production process. Given the different manufacturing activities in Botswana, a variety of raw materials are used in the sector. This explains why firms source raw materials from varied countries including China, South Africa, Dubai, Germany, Europe, Ghana, India, Sierra Leonne and Taiwan as recorded in the enterprise survey. The survey points to a number of reasons that push firms to source raw materials from foreign countries.

Results show that 38.9 percent of the respondents revealed that they source raw materials from outside the country because there are no domestic suppliers, followed by insufficient domestic supply at 28.5 percent, high local prices (22.1 percent), and unreliable domestic supplies at 9.4 percent. However, trading with foreign suppliers may also raise challenges. Common challenges as highlighted by the manufacturers include high international prices (28 percent), unreliable transportation (23.2 percent), unreliable suppliers (9.4 percent), insufficient supply (6.3 percent) and seasonal inputs (2.4 percent).

For those firms which identified higher prices as a challenge, majority were small (40.8 percent), followed by micro (28.6 percent), medium (24.3 percent) and large (5.7 percent). Similarly, for those which identified unreliable transportation as a challenge, the majority were small enterprises (40 percent), followed by micro, medium and large enterprises, at 31 percent, 22.4 percent and 6.9 percent respectively.

5.2.6.3 Access to Machinery

Most of the machinery used in the manufacturing production process is sourced from outside the country. Manufacturers indicated that they source their machinery from Germany, China, South Africa, England, France, India, Israel, Korea, Nigeria, Holland, Spain, Sweden, Taiwan, Turkey, United Sates of America and Zimbabwe. Quizzed on why they import machinery, manufacturers had varied reasons; 47.5 percent indicated that there are no domestic suppliers, 21.5 percent said there is insufficient domestic supply, 22.6 percent said that similar machinery of domestic origin are expensive, and 5.9 noted that domestic suppliers are unreliable.

The manufacturers highlighted a number of challenges in purchasing machinery from abroad and these include high prices (28.9 percent), unreliable transportation (20.1 percent), and unreliable suppliers (6 percent). Also, maintenance of imported machinery requires parts which are unavailable locally and a level of expertise which local technicians lack.

For micro enterprises, unreliable transportation (46%), unreliable supplies (41%) and inefficient suppliers (37.5%) were challenges they faced sourcing machinery from foreign suppliers. Small firms cited high prices and unreliable suppliers (41%), lack of skilled maintenance personnel (35%) and lack of locally available parts (33%) as their major constraints in importing machinery. Medium-sized firms were concerned about lack of locally available parts of imported machinery (44%), lack of skilled maintenance personnel (41%) and inefficient supply (37.5%).

5.3 Mitigation Measures

Constraints hindering the development of a robust and competitive SMME-led manufacturing sector have been assessed, starting from business development constraints, production-related constraints, and constraints leading to restrained market access.

What emerged from this assessment is that there are inherent inefficiencies in the national technical infrastructure which result in, amongst others, delays in pre-shipment inspections, certificates of origin, delays in conformity assessments and inefficiencies in quality control measures. These problems are in part attributable to the inadequacy of institutions responsible for the development of product standards.

Other key constraints that emerged from this assessment included limited access to finance, shortage of key skills as well as low uptake of technology.

Finally, production-related constraints such as access to serviced land, limited access to raw materials and machinery also hamper the competiveness of the manufacturing sector.

In an effort to ease the bottlenecks hindering the competitiveness of the manufacturing sector, we put forward the following mitigation measures:

- Given the importance of the diamond beneficiation subsector in Botswana's economic diversification efforts, inadequate local skills in this subsector calls for expedition of the establishment of a diamond polishing and cutting school. This should also include establishing relevant infrastructure such as laboratories and certification facilities used for diamond beneficiation;
- In view of the IUMP's stalled implementation due to lack of funds, it is recommended that government should identify and analyse financing options for the IUMP;
- CEDA should adopt the Turkish SMME development organisation approach and partner with the Ministry of Tertiary Education, Research, Science and Technology to establish a dedicated SMME e-learning facility that promotes financial literacy among SMMEs. CEDA should also investigate the feasibility of introducing SMME needs based financial products in order to improve access to finance for SMMEs and
- Craft a well-defined national strategy that details how institutions responsible for the development of products standards should work together to support SMME compliance with standards and regulations.

5.4 Conclusions

From the discussion above, several factors have been found to hinder the development and competitiveness of manufacturing sector SMMEs in Botswana. These include among others; lack of access to finance, markets, raw materials, limited manufacturing production related skills and support services.

Human capacity development needs were the greatest for small firms (micro and small), they cited lack of technical, financial and managerial expertise as major constraints. High cost of utilities was also mentioned as a major constraint for small and micro enterprises.

Discrepancies in business regulations, quality certifications as well as inadequacies in ICT infrastructure have also been noted to impact on SMME development. For this reason, there should be coordinated effort between industry, government departments and private sector associations to provide support for the sector.

Additionally, market access is hindered by inefficiencies in the national technical infrastructure which causes delays in; pre-shipment inspections, certificates of origin and conformity assessments. Inefficiencies in quality control measures coupled with SMMEs' limited ability to adhere to quality standards will also hinder market access.

We recommend that the government of Botswana work with BOBS, MITI and CEDA to improve efficiency of the national technical infrastructure.

CHAPTER 6
Key priority sectors in manufacturing

The manufacturing sector has numerous subsectors, some of which have the potential to grow and hence should be given financial assistance. In order to develop the manufacturing sector, it is important to determine priority sectors which CEDA could focus on for financing. These are subsectors which can offer quick returns in terms of both output and employment.

As a DFI wholly owned by government, CEDA could use stated national strategic considerations as criteria for selection of priority sectors. Other considerations can include import substitution which has the potential to reduce the import bill, availability of raw materials and technical capacity, and regional considerations in terms of value chains that have been identified as priorities. Alignment to priority regional sectors will make it easy for the country to participate in regional value chains. This chapter is therefore dedicated to identifying key priority sectors both at the regional and local levels. The main reason for sector prioritisation is to identify those with quick turnaround in the improvement of the manufacturing sector.

6.1 Prioritisation of Sectors

Before conducting subsector mapping and value chain analysis of the subsectors, it is crucial to select priority sectors and subsectors. As indicated above there are a number of criteria which can be used to select priority sectors.

These criteria could include among others: the availability of raw materials; value added; value of exports and imports (net trade); job creation/employment potential; access to markets, both local and external; skills and technical capacity of the production process; as well as government stated intention about the sector or subsector.

Government's intention on particular subsectors was derived from policy and strategy documents as well as the mandate of parastatals which are involved in the development of the manufacturing sector both at the local and regional levels.

The latter criteria were followed as well as a quantitative assessment of each prioritised sector in terms of employment, net trade at the national level and value added. In addition, a qualitative assessment of the selected sectors was undertaken to determine the ease with which raw materials used in each subsector could be obtained, and the skills or technical capacity of the production process and access to markets.

6.1.1 Regional Prioritisation

The development of the manufacturing sector in Botswana should be viewed in the broader context of regional integration due to the limited market size in the country. The country is a member of two regional groupings, the Southern African Customs Union (SACU) and Southern African Development Community (SADC). All the member states of SACU are also members of the SADC and hence are all bound by SADC trade protocols.

The structure of the economy of SADC countries is such that they rely on primary products, agriculture and mining, with limited industrialisation in terms of value added. As a result of this, in 2009 SADC embarked on a strategy to industrialise the region through the IUMP. Therefore, the major objective of the IUMP adopted in 2009 was specifically to implement the Regional Indicative Strategy Development Programme's (RISDP) component of industrialisation.

The specific objectives of the IUMP are to enhance the competitiveness of existing industrial capacity and promote regional value chains in selected sectors, including through the upgrade of existing manufacturing capacity.

The programme identified nine priority sectors: agro-food processing; processing of minerals (metallic and non-metallic); chemicals and pharmaceuticals; textiles and garments; leather and leather products; forestry; fisheries; machinery and equipment; and services. Most of the identified priority sectors lie within the realm of manufacturing, except the services sector which is used to support manufacturing processes. However, owing to limited funding the SADC IUMP has chosen to focus on three sectors: agro-processing; mineral processing and pharmaceuticals.

The Southern African Trade and Investment Hub, a United States of America (USA) organisation mandated to promote trade between Southern Africa and the USA, has identified several priority sectors which they focus on.

These sectors include: agro-processing; meat and meat products; leather; jewellery; semi-precious stones; arts and crafts; textile and apparels and indigenous products. Out of these, the Hub promotes exports of meat and meat products, jewellery (mineral processing); natural products; textiles and apparels.

The Hub promotes the export of textiles and apparels through the African Growth Opportunity Act (AGOA). This Act allows products from developing countries including Botswana to enter USA markets duty free or at reduced export duties.

Table 6.1 shows the regional priority sectors in manufacturing. As indicated, cross-cutting subsectors for SADC are agro-processing, mineral beneficiation and pharmaceuticals. The other cross-cutting subsector is textile and garments as it has been included under IUMP and AGOA.

Table 6.1: Regional Prioritisation of Manufacturing Sectors

SADC Industrialisation Strategy	SADC Industrial Upgrading and Modernisation Programme	AGOA National Response Strategy
Agro-processing; mineral beneficiation; pharmaceuticals.	Agro-food processing; processing of minerals; chemical and pharmaceuticals; textiles and garments; leather and leather products; forestry and fisheries; machinery and equipment and services.	Meat and meat products; textile and apparel; jewellery; semi-precious stones and indigenous products

6.1.2 National Prioritisation

As indicated earlier, national priorities are contained in several policy/strategy documents as well as institutional mandates of different government ministries/departments and parastatal organizations. The overriding guiding document is the national vision – Vision 2036: Achieving Prosperity for All. Vision 2036 was launched in 2016, when the country celebrated 50 years of independence.

The Vision provides an inclusive development path to be achieved through expansion of the domestic economy, while empowering Batswana to meaningfully participate in the development of the country. According to the Vision document, Botswana aspires to have a manufacturing sector that will produce commercially viable high value products targeted at the export market.

The Vision recognises that the manufacturing sector has the potential to contribute more to GDP by attracting investment, which will in turn create sustainable employment opportunities (Presidential Task Team, 2016). The Vision aspires that the country should "develop and deploy a skilled workforce utilising appropriate technology to add value to natural and imported resources to create high value products for the export market".

Aspirations contained in the Vision will be achieved by implementing successive national development plans throughout its lifespan. The first of these plans is the current National Development Plan 11 (NDP 11) which runs from 2017 – 2023. As indicated in NDP 11, achieving the goals of Vision 2036 will require a refocus of the country's current development model towards an export-oriented, labour intensive, and private sector driven one (Republic of Botswana, 2017).

The National Development Plan 11 theme is "Inclusive growth for the realisation of Sustainable Employment Creation and Poverty Eradication". One of the broad strategies to be followed during NDP 11 is development of diversified sources of economic growth which calls for initiatives such as beneficiation, cluster development, SEZ, EDD and Local Economic Development (LED).

The other broad strategy is the use of domestic expenditure as a source of growth and employment creation by ensuring that aggregate demand, including government expenditure, is used to support growth, employment creation, and pursuing export led growth due to limited size of the domestic market. This strategy will draw from the cluster model where the initial focus will be on diamonds, tourism, finance and mining among others.

According to NDP 11, the private sector in Botswana is fragmented with few linkages, business relationships and no established partnerships between producers and distribution networks.

In order to promote business linkages and partnerships, eight value chain studies covering the following sectors were undertaken: beef; tourism; horticulture; dairy; piggery; poultry; goat and leather (undertaken during NDP 10).

All of these sectors, except tourism, can contribute to the manufacturing sector through agro-processing.

As mentioned earlier, a number of key policy documents advocate for the development of the manufacturing sector and one such policy is the Industrial Development Policy (IDP) of 2014. It provides a framework for strategies and programmes to develop and promote diversified, sustainable and globally competitive manufacturing industries and services.

The IDP is to be achieved through the implementation of the National IUMP. The programme's main aim is to support the process of modernisation, growth and competitiveness of industries and related services.

This will result in job creation and access of domestically produced goods to national, regional and international markets. The programme focuses on nine priority sectors: agro-food processing; processing of minerals; chemicals and pharmaceuticals; textiles and garments; leather and leather products; forestry; fisheries, machinery and equipment and services. However, owing to limited funds, the programme is yet to be implemented.

As indicated in Table 6.2, Government's intention to develop particular sectors is contained in various policy and strategy documents as well as in mandates of some parastatal organizations.

Some of these policy and strategy documents are: Botswana Excellence: A Strategy for Economic Diversification and Sustainable Growth; National Export Strategy (NES), National Trade Policy (NTP) and Agriculture Value Chain Strategy and cluster development. The table also includes institutions with have been mandated to develop the manufacturing sector: Botswana Investment and Trade Centre (BITC); Special Economic Zone Authority (SEZA); and National Food Technology Research Centre (NFTRC).

Table 6.2: National Priority Sectors

Botswana Excellence Strategy	Industrial Development Policy	National Export Strategy	National Trade Policy	Botswana Trade and Investment Centre	Special Economic Zone Authority	Agricultural Value Chain Strategy	Cluster Development
Beef and beef products; high value agricultural products; agro-processing; tourism; diamond beneficiation; banking and financial services	Agro-based manufacturing; mineral beneficiation; textile and clothing; footwear; automotive	Beef and beef products; jewellery; garments and textiles; leather and leather products; hides and skins; arts and crafts	Arts and crafts; garments and textiles; jewellery and semi-precious stones; light manufacturing; leather and leather products; meat and meat products; indigenous products; with a focus on arts and crafts; jewellery and semi-precious stones and indigenous products.	Automotive parts; leather processing; mineral beneficiation and ICT	Meat and meat products; finance and technology city; diamond and logistics; diamond beneficiation; agro polis (cereal production)	Beef and beef products; Horticulture, Leather, textiles, and, dairy	Diamonds, beef; service sectors: tourism, financial services, education and health

NB: Most of the subsectors contained in the policy and strategy documents fall under the realm of manufacturing, except for tourism, banking and financial services, arts and crafts, ICT, education and health. However, these subsectors support the development of the manufacturing sector

From Table 6.2, it is clear that the most common priority sectors among the different institutions and strategy documents are: meat and meat products; mineral beneficiation; leather and leather products (these are products of the beef value chain); agro-processing; textile and apparel/garments; arts and crafts.

Taking this and the SADC/IUMP process into account, the following sectors should be regarded as priority sectors for Botswana: agro-processing; mineral processing, leather and leather products, chemical and pharmaceuticals; and textiles and garments.

These were chosen because for some, their raw materials are available locally, and they have high employment creation potential. Soda ash, automotive parts and plastics are other emerging subsectors worth considering because their raw materials are available locally and they can link seamlessly with regional value chains.

One of the reasons why government is committed to developing the manufacturing sector is job creation. Table 6.3 shows employment by subsector in the manufacturing industry for 2018.

The top five employers are fabricated metal products, clothing and other apparel (including leather), machinery and equipment printing and publishing and furniture.

These five subsectors contribute 17,279 (46 percent) jobs to the total number in the manufacturing industry. Among the top five employers, clothing and other apparel is the only one included in the priority sectors.

The highest employer, fabricated metal products, and the other three subsectors that contribute substantially to employment (such as machinery and equipment, printing and publishing and furniture) are not included in the priority sectors.

Table 6.3: Number of Paid Employees in the Manufacturing Industry, September 2018

Industry	No. of Employees
Fabricated metal products	4982
Clothing and other wearing apparel	3631
Machinery and equipment	3353
Printing and publishing	2911
Furniture	2402
Meat and meat products	2074
Non-metallic mineral products	2049
Manufacturing of other products	1992
Other transport equipment	1979
Wood and wood products	1809
Bakery products	1620
Grain mill products	1433
Textiles	1102
Beverages	963
Dairy products	795
Chemical and chemical products	774
Tanning and leather products	754
Manufacturing of jewellery	751
Other foods	661
Rubber and plastic products	581
Electrical machinery and apparatus	458
Paper and paper products	229
Office, accounting and computing machinery	180
Radio, television and communication equipment and apparatus	131
Motor vehicles, trailers	94
Basic metals	88
Recycling, processing of metal and non-metal	86
Cement manufacturing	52
Medical, precision, optical instruments	28
Total	37962

Source: Statistics Botswana

Criteria that could be used to select priority sectors is their contribution to net trade. As shown in Table 6.4 only two priority sectors, meat and meat products and jewellery have a positive net trade.

However, the subsectors with negative net trade imply that there are opportunities for local production to meet the local demand. Firms in these subsectors could take the advantage of local demand and actually grow given these opportunities and gradually develop into export firms. The sectors with negative trade balance and included in the priority list are: leather and leather products; agro-processing (grain milling, dairy products); chemical and chemical products; textiles and pharmaceuticals.

Table 6.4: Net Trade in the Selected Priority Sectors- 2016

Manufactured Product	Imports (Pula)	Exports (Pula)	Net Trade (Pula)
Jewellery	507 841 476.61	4 407 351 826.00	3 899 510 349.39
Meat and meat products	214 146 399.00	1 228 158 256.00	1 014 011 857.00
Chemicals, other than fertilisers	194 699 527.00	440 711 227.00	246 011 700.00
Glass and glass products	186 776 662.43	25 991 381.00	-160 785 281.43
Animal Feeds	230 926 690.00	9 059 067.00	-221 867 623.00
Fertilisers	232 620 561.00	677 425.00	-231 943 136.00
Dairy products	363 164 180.00	5 667 916.00	-357 496 264.00
Grain milling	534 192 975.00	41 407 954.00	-492 785 021.00
Leather and leather products	521 734 403.00	6 972 975.00	-514 761 428.00
Plastic products	938 415 804.33	301 974 338.00	-636 441 466.33
Fruits and Vegetables products	697 210 407.00	23 619 459.00	-673 590 948.00
Other chemicals	753 626 182.92	24 609 883.00	-729 016 299.92
Textiles	2 039 640 651	1 307 912 652	-731 727 999.00
Soap and Detergents	1 099 247 442.27	53 922 209.00	-1 045 325 233.27
Pharmaceuticals	2 067 554 216.46	174 610 423.00	-1 892 943 793.46

Source: Statistics Botswana

The total exports of manufactured products amounted to P13,491,130,450, while imports of the same products amounted to P45,107,645,256 resulting in a net trade balance of minus P31,616,254,979 in 2016. So, Botswana is a net importer of manufactured products, especially those selected as top priority sectors which the country should develop.

The development of these sectors will go a long way in reducing the trade deficit in manufactured products as well as increase the country's value added from the manufacturing sector.

In addition, this will contribute to employment creation and thereby reducing the high unemployment rate the country is currently experiencing.

A further analysis of the identified priority sectors was undertaken in order to determine each subsector's potential for employment creation, net trade as well as value added. Table 6.5 presents the results of that analysis.

Table 6.5: A Qualitative Analysis of the Priority Sub-sectors

Sub-sector/Criteria	Value Added (P million)	Net Trade (P million)	Employment (No. of employees)
Meat and meat products	1,355	1,014	2,074
Leather and leather products	17.2	-514	754
Jewellery	n.a	3,899	n.a
Clothing and Wearing Apparel	182.8	843	3,631
Plastic products	n.a	-397	581
Chemicals	n.a	-729	774

Source: Statistics Botswana
Notes: n.a – not available

Other key considerations for the priority sectors are difficult to quantify such as access to markets, skills and technical knowledge and availability of raw materials.

For the meat and meat products sector, the country is a net exporter and has quota free access to the European Union and South African markets, while the Norwegian market is limited to a quota of 1600 tonnes annually.

Market access for the leather and leather products locally is a problem as these are sold through the retail market which is dominated by supermarkets. These supermarkets sell imported products making it difficult for the locally produced goods to enter the market.

Similarly, SMMEs in the clothing and apparel sector face constraints when marketing their products locally as they are unable to access the supermarkets because their products are uncompetitive relative to imported products. These constraints apply also to both the plastic and chemical products sectors.

In terms of export markets, the country has unlimited access to the US market for textiles and apparels through AGOA but is failing to take this opportunity because its products are uncompetitive.

Pertaining to technical skills, for the meat and meat products sector, the country has set up an export abattoir; Botswana Meat Commission (BMC). The BMC is an important link between smallholder farmers and both the local and export markets. Technical skills in the leather and leather products and jewellery sectors are lacking and this has hampered the development of these sectors.

Similarly, the country lacks skills in the clothing and wearing apparels, plastics and chemicals sectors. Therefore, the development of these sectors will have to rely on imported skills in the short term and training in the longer term.

One key consideration for the development of priority sectors is availability of raw materials. For the meat and meat products and leather and leather products sectors, the raw materials are available locally from slaughter cattle.

For the jewellery sector, some raw materials are available locally from diamond cutting, while others are imported. The Clothing and wearing apparel, and plastics and chemical sectors rely on imported raw materials.

6.2 Conclusions

From the discussion above, ten manufacturing subsectors have been selected as priority subsectors whose value chain mapping and analysis will be undertaken in the next chapter.

These are: beef; leather, grain and horticulture (agro-processing); diamond; textile and apparels; automotive parts; plastics, and chemicals and pharmaceuticals. These subsectors were selected from key regional and national policy and strategy documents.

Apart from the beef and leather subsectors all the other subsectors depend on imported raw materials as there is limited or no supply from local suppliers. This in itself can create problems especially if regional value chains are not well developed.

CHAPTER 7
Value mapping and analysis of priority sectors

The value chain development approach is normally used to identify bottlenecks in the system, unearth their root causes and propose holistic upgrading strategies that lead to more sustainable firms. The approach assesses how value in the end market is created by successive chain activities conducted by actors who are supported by various service providers and who are influenced by the particular business environment in which they operate.

The use of the value chain approach in this study is specifically to identify opportunities for manufacturing firms, rather than conduct a holistic analysis of value chains selected. This should include identifying supply chain opportunities at the local level, and identify key areas of participation by SMMEs in the identified value chain opportunities with the potential to mature into sustainable business linkages locally, regionally and internationally.

The identified priority sectors are: beef; leather, grain (sorghum and maize); diamond, textile and apparels; automotive parts, plastics and plastic products.

The study does not map the value chains for automotive parts, plastics and plastic products because of the limited involvement of SMMEs in these sectors. However, a discussion of these and other potential value chains such as soda ash is undertaken with the view to invest in their development in the future.

Additionally, the chapter discusses regional value chains that Botswana participates in such as soda ash and pharmaceuticals, which are not in the priority sectors but have the potential to offer opportunities for SMMEs in future.

7.1 Local Value Chains

7.1.1 Meat and Meat Products

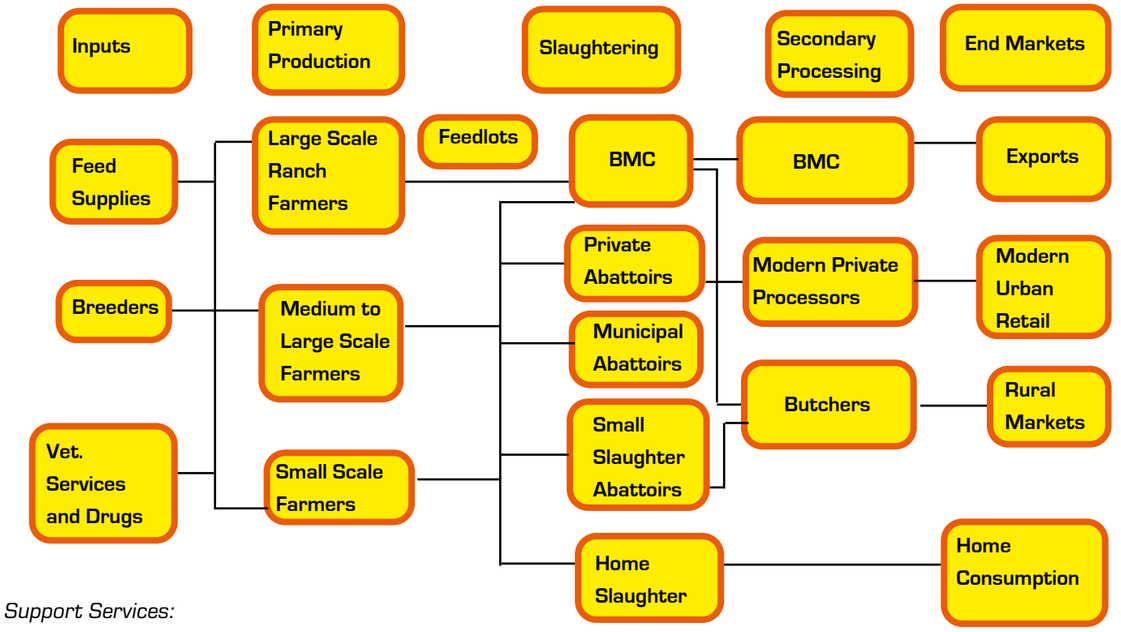
Botswana is a major exporter of meat and meat products to, predominantly, South Africa and Europe. The only major export commodity under this category is beef and its by-products. As indicated earlier in Chapter 6, the meat and meat products sector employed 2, 074 paid employees as at September 2018 and had a trade balance of over P1 billion in 2016 (Statistics Botswana, 2016 and 2018). In fact, beef is the only major agricultural export commodity.

7.1.1.1 Beef Value Chain Mapping

A number of value chain studies have been conducted in the beef sector with the pioneering one being facilitated by the Food and Agriculture Organisation (FAO) of the United Nations in collaboration with the Ministry of Agriculture and Food Security in 2013. Another study was carried out by the Centre for Development Enterprise (CDE) through the Private Sector Development Programme (PSDP) in collaboration with MITI in 2015.

Figure 7.1 shows a simplified beef value chain map. The value chain map shows a number of value chain actors from input suppliers to primary producers, slaughtering, secondary processing until the product reaches the end market (consumers), both in the local and export markets.

Figure 7.1: Beef Value Chain Map



Support Services:

Policy and Regulatory Environment; Research and Extension; Financial Services; Transport; Education and Training; Farmers' Associations, Botswana National Beef Producers Union

Source: Adapted from FAO, 2013.

Support Services

The policy and regulatory framework within which the beef sector operates is important for its performance. One of the important regulations in the beef sector is the Botswana Meat Commission Act of 1965. The Act gives the BMC monopoly over exports of meat and by-products as well as live cattle. As a result of this and the fact that the BMC is the single largest buyer of slaughter cattle it is a price leader in the Botswana beef market. Government through the Departments of Agricultural Research (DAR); Animal Production (DAP) and Veterinary Services (DVS) provide research and extension services to the beef sector. In addition, the DVS provides traceability as required by Botswana's major market the European Union (EU). Education and Training is offered by the Botswana University of Agriculture and Natural Resources (BUAN), while financial services are offered by commercial banks and DFIs including CEDA.

Input Suppliers

There are a number of input suppliers in the beef value chain and these include: feed suppliers; breeders, veterinary services and drugs' suppliers. Feed suppliers use ingredients that are mostly imported as the country has a deficit in grain production. In 2016, the country imported P230 million worth of feeds, the bulk of which was used in the beef industry. Botswana still relies on importation of quality bred animals, especially from South Africa. Veterinary services are provided by government through the Department of Veterinary Services and private veterinarians particularly in urban centres.

Primary Production

The raw material for manufacturing in the beef value chain is slaughter cattle which are sourced from different producers. In terms of the number of cattle kept in different production systems, the majority (78 percent) of cattle are in the communal areas, which comprises medium and small scale producers and the remainder (22 percent) are kept in ranches. As shown in Figure 7.1, slaughter cattle are supplied from large scale ranch owners, large to medium scale and small scale producers.

In 2015, the large scale ranchers/commercial sector supplied 47,823 (37 percent), while the communal sector supplied 71,850 (63 percent) cattle for slaughter. There is an emerging feedlot market in which weaners are sold to the slaughter market. The BMC used to operate this facility, but has since stopped and left the service to private feedlots. The feedlots supplied 9,842 (9 percent) cattle for slaughter in 2015. It is important to note that slaughter cattle supply fluctuates because of two main reasons - droughts and price incentives received by farmers.

In terms of employment, there were approximately 17, 518 labourers employed in the traditional sector, both in livestock and crops, with the majority being employed in livestock. Given the average wage of P832.00, this translates to about P14,574,976 worth of employment in the traditional sector alone. In the commercial sector there were 1,578 farms out of which 1,280 employed 4,086 labourers. The total earnings for farm employees in the commercial sector amounted to P4,751,855 with average earnings of P1,163 in 2015.

Slaughtering

Beef processing starts with the slaughter of animals. There are a number of value chain actors at the slaughtering stage with the main one being the BMC which slaughtered 46 percent of cattle in 2015. The BMC is the most preferred market outlet for large farmers because of its ability to slaughter large numbers, with 60 percent selling through this channel in 2015. The other market outlets are small slaughter abattoirs (81 in total) which are scattered throughout the country, municipal abattoirs (about 15 in total) which service the butchery market and modern private abattoirs and processors (just over 3).

Secondary Processing

The main processor and sole exporter of beef is the Botswana Meat Commission (BMC). There are other meat processors who sell their processed products only in the local market as the BMC Act gives BMC monopoly over exports of beef and its by-products. Apart from the BMC and other large meat processors such as Quality Meat, Gantsi Beef and Senn Foods, there are numerous butcheries in the country as well as slaughter houses. The BMC processed 51 percent of beef in 2015, compared to butcheries and modern slaughter facilities which processed 43 percent and 6 percent respectively. Slaughter houses kill cattle and skin them for butcheries and other meat processors. Most butcheries, especially in rural locations, undertake limited processing of meat with the majority just cutting the meat into small pieces, ignoring quality cuts, and selling to consumers. The modern slaughter facilities have processing plants which cut the meat into different types and processes it into different products. Another channel through which beef reaches the consumers is home slaughter especially for ceremonies such as weddings and funerals. This channel takes about 20 percent of slaughter animals (Statistics Botswana, 2018).

End Markets

The beef export market includes the European Union, Norway, South Africa, and other regional markets. The local market, especially in rural areas, is supplied by butcheries, while in urban centres beef and processed products are supplied by retail chain stores and meat processors. The other local end market is the food services sector such as restaurants and other outlets that sell cooked food.

Botswana, through the BMC, exports semi-processed beef products and most of the beef is used for manufacturing in the export markets. Roughly the same proportion of beef is consumed locally and exported as a result of increases in population and personal disposable income. As indicated earlier a substantial amount (about 20 percent) of beef consumed locally is from home slaughter.

7.1.1.2 Opportunities for SMMEs

Manufacturing in the beef value chain takes place during slaughter and processing of meat into finished products as well as the processing of inputs that support the value chain. In 2018, the country imported P216 million worth of processed meat and meat products, while exports stood at P973 million making the country a net exporter as shown in Table 7.1.

Table 7.1: Imports and Exports of Meat and Meat Products - 2018

Product	Imports (BWP)	Exports (BWP)	Net Trade Balance (BWP)
Meat of bovine animals; fresh or chilled	8 356 280	438 867 752	430 511 472
Meat of bovine animals; frozen	5 489 617	522 726 060	517 236 443
Meat of swine; fresh, chilled or frozen	35 032 246	1 298 547	-33 733 699
Meat of sheep or goats	3 446 033	175 766	-3 270 267
Meat; of horses, asses, mules or hinnies,		13 162	13 162
Edible offal of bovine animals, swine,	16 245 812	760 288	-15 485 524
Meat and edible offal of poultry	59 108 933	774 803	-58 334 130
Meat and edible meat offal	532 506	8 689	-523 817
Pig fat, free of lean meat, and poultry fat,	602 443	210 000	-392 443
Meat and edible meat offal; salted	1 682 572	4 879 606	3 197 034
Sausages and similar products of meat,	4 479 164	7 891	-4 471 273
Prepared or preserved meat, meat offal	70 605 379	1 201 905	-69 403 474
Extracts and juices of meat, fish	10 603 459	2 369 820	- 8 233 639
Total	**216 184 443**	**973 118 523**	**757 109 846**

As indicated in Table 7.1, Botswana is a net exporter of beef, but a net importer of other meat products such as swine, sheep and goats as well as poultry. The country also imports processed products such as sausages and prepared and preserved meat products. This presents opportunities for SMMEs to process beef into different products and substitute imports.

The BMC monopoly over exports of beef and its by-products has stifled the development of the processing sector in Botswana. There are a few processors who sell processed products to the limited local market. BMC exports some of its products in a semi processed form, thereby denying opportunities for the private sector to undertake further processing, particularly SMMEs. This presents opportunities for further processing for local and export markets. Plans are underway to remove the BMC's export monopoly. This will give other players an opportunity to export beef and its by-products.

While it is not anticipated that a lot of slaughter houses will be able to export beef because of strict export requirements, this may create opportunities in the manufacturing sector with meat processors being able to export processed products to neighbouring countries, particularly South Africa which is a net beef importer.

In order for the SMMEs to benefit from the beef value chain the blockages identified in the chain must be removed. Previous beef value chain studies identified the BMC as one of the major blockages in the beef value chain. As the single largest buyer of slaughter cattle, and a monopoly exporter, the BMC has depressed producer prices across the country because of inefficiencies at its slaughter plants.

The planned removal of its export monopoly and its privatisation is expected to increase producer prices, thereby stimulating primary production in the value chain. This will present more opportunities for SMMEs in both the meat processing and animal feed sector.

Another blockade in the beef value chain is the supply of slaughter cattle. Productivity at the farm level has remained low, with off-take rates and cold dressed mass (CDM) being stagnant for a considerable time, especially in the traditional sector.

This is despite the fact that government has come up with initiatives to improve productivity such as the use of exotic breeds of bulls and artificial insemination (AI) to improve the progeny of the Tswana breed. In addition, government through extension services has called for improvement in management practices in livestock farming which has the potential to increase productivity.

However, such initiatives have not yet borne fruits because of poor uptake by farmers and hence persistent low productivity. This calls for concerted efforts to improve productivity in the sector if the country is to continue exporting beef. Recent initiatives include cluster farming which is being piloted by the National Strategy Office (NSO).

This and other initiatives are expected to improve livestock management and hence productivity, leading to improved beef production and hence more beef available for the processing sector.

For inputs used to support the production of slaughter animals the country is a net importer, with imports of animal feeds amounting to P426 million, against exports of P7.7 million. Therefore, one identifiable opportunity for SMMEs within the beef value chain is in feed supply.

For this reason, there are opportunities for small scale local feed processors who could sell feed to beef cattle producers. The value of these opportunities in the local market can be estimated by the net traded value which stood at negative P396 million in 2018.

This will increase employment in the grain mill products sector, whose employment stood at 1, 433 in September 2018, and other supporting industries. However, feed processing requires inputs which comprise of grain and its by-products. These ingredients are in limited supply in the country hence the bulk of them are imported.

The success of the feed processing industry is dependent on the supply of fodder or grains which the country is currently importing in large quantities. This calls for fodder production which is currently limited in the country. So, feed manufacturing can also stimulate other value chains such as fodder production.

Table 7.2 indicates that the largest quantifiable opportunity in terms of net trade lies with the ingredients used in the preparation of animal feed at P235 million, followed by oil-cake and bran which is a by-product of the milling industry. The large volume of imported products presents opportunities for import substitution which SMMEs could take advantage of. For this to happen, raw materials should be produced in abundance and/ or imported. In the short-term, SMMEs should be provided with a conducive environment through which they could import the raw materials for further processing in the country. In the medium to long-term there must be concerted efforts to promote domestic production of the raw materials for use by SMMEs for further processing.

Table 7.2: Imports and Exports of Animal Feeds - 2018

Product	Imports (BWP)	Exports (BWP)	Net Trade Balance (BWP)
Flours, meal and pellets, of meat or meat offal,	601 568	471 696	9 830 957
Bran	55 850 944	45 201 138	-39 589 695
Residues of starch manufacture,	351 169	34 945	-349 128
Oil-cake and other solid residues, resulting from the extraction of soya-bean oil	118 470 593	13 514 724	-118 470 593
Oil-cake and other solid residues; resulting from the extraction of ground-nut oil	99 134	413	43 178
Oil-cake and other solid residues;	13 158 231	1 704 765	-11 712 487
Wine lees; argol	12 789	81	-11 716
Vegetable materials and vegetable waste,	195 339	1 606	-195 339
Preparations of a kind used in animal feeding	237 332 502	16 841 202	-235 847 675
TOTAL	**426 072 269**	**7 770 569**	**- 396 302 496**

The other important input into feed processing is the machinery and equipment used. Most machinery and equipment is imported, however, there has been an emergence of machinery manufacturers in the country, especially for fodder processing. Therefore, within the feed value chain there are opportunities for small machinery manufacturers which SMMEs could exploit. However, experience has shown that these are mainly for on the farm processing.

The government through the Livestock Management Infrastructure Development (LIMID) programme gives subsidies to farmers who purchase fodder processors. However, it is difficult to quantify the opportunities as the ministry does not keep proper records of those who received assistance.

7.1.2 Leather and Leather Products

Some of the by-products of the beef value chain are hides and skins. These by-products are produced at slaughter houses across the country with the largest single slaughter house being the BMC. Currently the hides and skins are exported in semi-raw form and the country imports products made from leather such as shoes, purses, ladies' handbags and so on, as well as processed leather.

Consequently, the country is a net importer of leather products, but it exports a substantial amount of hides and skins in raw and semi-processed form. For example, in 2016 Botswana imported over P520 million worth of leather and leather products, while exports for the same period amounted to approximately P7 million, resulting in a negative net trade balance of P514 million.

The exports comprised mainly semi processed products, while imports comprised finished leather and leather products.

7.1.2.1 Leather Value Chain Mapping

Figure 7.2 shows the leather value chain mapping. There are numerous actors in the chain from input suppliers to end markets. The support services in the leather value chain comprise of the policy and regulatory environment within which the sector operates and are similar to those in the beef sector as hides and skins are a by-product of the beef value chain

Input Suppliers

Inputs used in leather processing and manufacturing include chemicals, machinery and equipment. These inputs include sodium sulphide, wetting agents, slacked lime, sodium chloride, salt, and sulphuric acid. The chemicals are sourced from both the local manufacturers and imports, while machinery and equipment is mostly imported.

Primary Production

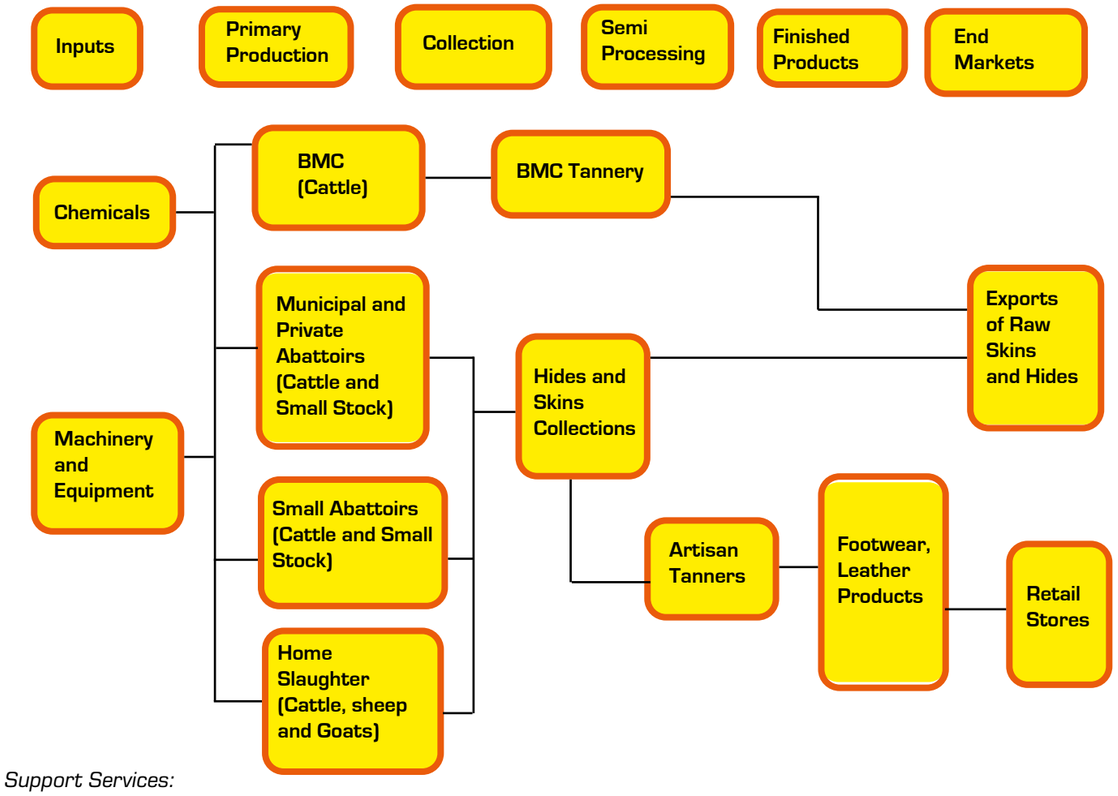
Primary production level involves the supply of hides and skins and major suppliers are local slaughter houses. The BMC is the largest supplier followed by small abattoirs and private modern abattoirs. The other supply channel is the home slaughter where households slaughter cattle and small stock (sheep and goats) for home consumption in activities such as weddings and funerals.

With a cattle population of 1,744,000 and an estimated offtake of 9.2 percent, the amount of raw skins and hides available stood at 160,448 in 2015.

The number of raw skins from home slaughter is estimated at 32,089 given that homes slaughter stands at 20 percent in the traditional sector which dominates the slaughter market.

Thus, the total estimated supply of hides and skins from cattle stood at 192,577 in 2015. The amount of raw skins and hides available for sheep and goats is estimated at 21,395 and 113,292 respectively given an average offtake of 9.4 percent for both species. Of these, 8,986 are from home slaughter for sheep and 47,582 for goats given that slaughter constitutes a significant proportion (42 percent) of slaughter animals in the small stock sector.

Figure 7.2: Leather Value Chain Map



Support Services:

Policy and Regulatory Environment, Financial Services, Transport, Finance

Collection

Raw hides and skins are sourced from slaughter houses such as the BMC, private modern slaughter houses and small slaughter houses. There are also hides and skins collectors who aggregate the raw hides and skins from small slaughter houses and home consumption. Collection from home consumption is particularly low due to the price paid and this results in loss of raw hides and skins.

This is particularly true for small stock hides and skins where a significant proportion (42 percent) is from home slaughter in many households across the country. Most of the raw hides and skins are thrown away as there is no market for them and collection is difficult as most of the slaughtering is done at home.

Semi Processing

After collecting the raw hides and skins, they are salted for preservation. The salted skins are then sold to artisan tanners. The bulk of the semi-processed hides and skins are exported mainly to South Africa for further processing and some are imported back into the country as finished leather or finished leather products.

Secondary Processing

As for the BMC, raw hides and skins were processed in their tannery to wet blue stage and then exported. However, due to environmental problems of effluent in the tannery, the BMC stopped the processing of raw hides and skins in 2006. Currently, the BMC, which accounts for about half of all the slaughters in Botswana, auctions hides and skins from its abattoirs. The majority of these skins and hides end up in export markets.

Artisan tanners process the raw hides and skins into different leather products such as bags, footwear and other products. Leather manufacturers import the bulk of the finished leather from imports as the majority of raw skins and hides are exported. For this reason, finished leather re-enters the country as finished products after being processed outside the country.

End Markets

Locally produced leather products are then sold in retail stores in the country. The bulk of finished leather products are, however, imported.

7.1.2.2 Opportunities for SMMEs

Government has shown commitment to develop the leather industry in order to use these raw materials which are sourced locally. In 2016, the total value of imported tanned and dressed leather products was P1, 232,769.00, while exports amounted to P469, 076.00 indicating a negative trade balance of P763, 693.00.

Furthermore, the imports of manufactured products of footwear, which mainly use leather, amounted to P432, 416,881.00 while exports totalled P5, 475,846.00, which resulted in a negative trade balance of P426, 941,135.00.

The exports of raw hides and skins amounted to P68.3 million. These statistics show that there are opportunities for SMMEs in the collection and further processing of raw hides and skins.

Collection and commercialisation

Collection of raw hides and skins is low in Botswana due to a lack of commercialisation. Most skins and hides are not collected especially those from home slaughter. There are opportunities for collection of more hides and skins from cattle and small stock especially from home slaughter.

As indicated earlier, the estimated skins and hides to be collected stands at 32,089 for cattle and 56,568 for small stock. According to CDE (2015), only 8.6 percent of hides and skins are collected compared to Ethiopia's 19 percent.

The increase in the collection of hides and skins will not only increase employment but also the amount of hides and skins available for processing and export, and as a result increase the value added in the sector.

Table 7.3 shows that Botswana exported raw hides and skins of bovine animals (cattle) worth P7.5 million and imported only P411, 291 resulting in a net trade balance of P7 million. Similarly, the country exported raw hides and skins for sheep and goats with a trade balance of P832, 837.00.

This presents opportunities for artisan tanners in the short-term. However, as stated elsewhere in this report this is dependent on the introduction of such interventions as export ban on raw hides and skins.

The trade balance for the tanned hides and skins for cattle, sheep and goats also gave a positive trade balance of P1.4 million and P9 million respectively. However, for the processed products, the country is a net importer as shown by the negative trade balances, with the highest being trunks at P92 million, followed by articles of apparel at P33 million.

Therefore, there are numerous opportunities for SMMEs through import substitution of a variety of leather products as shown in Table 7.3.

Table 7.3: Imports and Exports Leather and Leather Products - 2018

Product	Imports (BWP)	Exports (BWP)	Net Trade (BWP)
Raw hides and skins of bovine (including buffalo)	441 291	7 527 144	7 085 853
Raw skins of sheep or lambs	1 578	834 415	832 837
Raw hides and skins		3 035 592	3 035 592
Tanned or crust hides and skins of bovine	116 056	1 520 742	1 404 685
Tanned or crust skins of sheep and lambs		9 317 361	9 317 361
Tanned or crust hides and skins of other animals			-
Leather further prepared after tanning or crusting, bovine	208 131	8 000	-200 131
Leather further prepared after tanning or crusting, including parchment dressed leather, of sheep or lamb	4 721	77 590	72 870
Leather further prepared after tanning or crusting, including parchment-dressed leather, of animals (other than ovine)	14 173	83 215	69 042
Chamois	358 830		358 830
Composition leather with a basis of leather or leather fibre	60 130	81 354	21 224
Trunks; suit, camera, jewellery, cutlery cases	94 025 377	1 587 883	-92 437 494
Articles of apparel and clothing accessories, of leather or of composition leather	34 058 584	795 377	-33 263 207
Leather or composition leather articles	5 575 732	1 000	-5 574 732
Articles of gut (other than silk-worm gut), of goldbeater's skin, of bladders or of tendons			-
Raw furskins	916 278		-916 278
Tanned or dressed furskins	103 969	123 917	19 948
Articles of apparel, clothing accessories and other articles of furskin	428 500		-428 500
4304: Artificial fur and articles thereof	753 039	298	-752 741
TOTAL	**138 333 236**	**24 994 482**	**-113 338 754**

Tanning and leather finishing

Currently there is no commercial tanning industry in Botswana. As such, there are opportunities for SMMEs to process the hides and skins into finished leather which can be used in the manufacturing of leather products as well as for export. The exported finished leather will attract a higher value than the raw hides and skins and hence generate more value and create more jobs. If all exported raw hides/skins were processed to wet blue then exports of wet blue would increase and surpass the P7 million which is currently obtained from exports of raw hides and skins. Using CDE estimates, the value of exports will increase by 2.33 times.

Leather products manufactures: footwear and other leather products

Centre for Development Enterprise (2015) estimates that in Botswana only 2.6 percent of hides and skins are processed into final products. This low level of leather utilisation in manufacturing results in a very small share of employment (11 percent) of the total employment in the sector. By comparison in Ethiopia, the leather sector employs a higher proportion (65 percent) of employees. If Botswana was to raise its leather utilisation, it would gain more in terms of revenue generated and employment. Clearly, opportunities exist for SMMEs in the manufacturing of leather products for both the local and international markets.

Plans have been underway for some time to develop the leather industry e.g. Establishment of a Leather Industry Park (LIP) in Lobatse where most of the hides and skins are produced in the BMC's slaughter plant. However, the project was delayed after feasibility studies were undertaken and LEA conducted another feasibility review study. The study has revealed that LIP has potential and is a viable undertaking. However, the study cautions that the current livestock numbers (cattle and small stock) are low and there may be need to import more hides and skins to make LIP financially viable. LIP will unblock the limiting constraints in leather value chain and revive Botswana's leather industry. This will reduce importation of finished leather and hence remove raw material access challenges faced by SMMEs which manufacture leather products. Access to raw materials was cited in the enterprise survey as one of the major constraints to SMME development, especially if they are sourced from outside the country.

Establishment of the leather park will open opportunities for further processing by artisans and this is an area where SMMEs could benefit. It is estimated that establishing the Leather Industry Park will create about 5, 000 jobs, which will contribute significantly to job creation in the manufacturing sector. If the leather value chain is developed through to high quality tanning, this could attract leather seat manufacturers operating in the automotive value chain. To promote manufacturing in the leather value chain, the country needs to develop conducive and coordinated policies. Interventions should be at the collection, secondary and primary processing if they are to have a systemic impact.

7.1.3 Grain Processing

Botswana is a net importer of food grains. The main products of grain consumed in the country are sorghum meal, maize meal, wheat flour and rice. As indicated in Chapter 6, exports of grain milling products amounted to P41 million, while imports amounted to P534 million in 2016, resulting in a negative trade balance of P492 million.

Table 7.4: Imports and Exports of Grain Milling - 2018

Product	Imports (BWP)	Exports (BWP)	Net Trade Balance (BWP)
Wheat and meslin	294 523 388	87	-294 523 301
Rye			-
Barley	112 185		-112 185
Oats	1 604 924		-1 604 924
Maize (corn)	372 198 980	6 315 371	-365 883 609
Rice	311 873 442	3 904 425	-307 969 017
Grain sorghum	17 589 186	3 771 538	-13 817 647
Buckwheat, millet and canary seeds; other cereals	30 084 106	41 109	-30 042 997
Wheat or meslin flour	14 211 313	363 402	-3 847 911
Cereal flours; other than of wheat or meslin	1 567 673	234 725	-1 332 947
Cereal groats; meal and pellets	48 554 769	7 406 321	-41 148 448
Cereal grains otherwise worked	10 777 221	41 044	-10 736 178
Flour, meal, powder, flakes, granules and pellets of potatoes	771 229	17 087	-754 141
Flour, meal and powder; of the dried leguminous vegetables	1 068 891	1 118	-1 067 773
Malt; whether or not roasted	81 918 311	25 151	-81 893 160
Starches; inulin	1 928 937		-1 928 937
Wheat gluten; whether or not dried	1 196 690	212	-1 196 478
TOTAL	**1 189 981 245**	**22 121 591**	**-1 167 859 654**

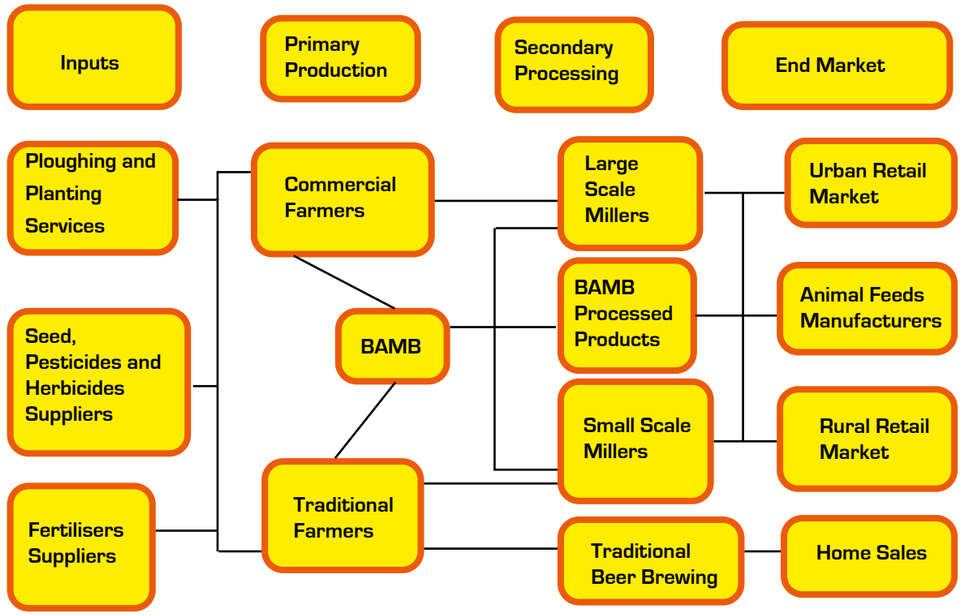
Botswana remains a net importer of grains as indicated in Table 7.4. In 2018 total imports of grains amounted to P998 million, while exports for the same period stood at P14 million resulting in a trade deficit of P984 million. During the same period, imports of processed products totalled P162 million, while exports amounted to P8 million resulting in a trade deficit of P154 million. The product with the largest trade deficit of P82 million is malt, followed by cereal groats, meal and pellets at P41 million, cereal grain at P11 million, and starches and flour meal of vegetables at P1 million. Therefore, opportunities exist for SMMEs to exploit and substitute imports and reduce the country's high import bill.

7.1.3.1 Sorghum Value Chain Mapping

Inputs

As indicated in Figure 7.3, at primary production stage the main inputs used in the sorghum value chain include seed, pesticides, herbicides and fertilisers. The bulk of these are imported, with a smaller proportion being produced locally. For example, the government supplies seeds through its Seed Multiplication Unit in the Department of Agricultural Research. Other inputs such as machinery and equipment are mainly imported.

Figure 7.3: Sorghum Value Chain Map



Support Services:

Regulatory Environment; Transport; Finance' Extension Services; Research; Botswana Millers Association

Primary Production

Sorghum production takes place under two production systems, the commercial and traditional systems. In 2015, the bulk (95 percent) of sorghum produced was from commercial farmers. This is despite the fact that commercial farmers makeup a minority of grain producers.

For example, in 2015 only 49 holdings reported planting sorghum in the commercial sector, while 35,589 indicated that they planted the same crop in the traditional sector. Total production of sorghum stood at 37,508 tonnes in 2015, which was well below the country's requirements. As a result, the country had to import sorghum grain to meet its domestic needs.

Secondary Processing

Despite the fact that Botswana is a net importer of grains, the country has a relatively developed sorghum milling industry. The local milling industry development was spearheaded by the sorghum dehulling technology introduced by Rural Industry Innovation Centre (RIIC) in the late 1970s.

A few large companies process sorghum into sorghum meal. These include Foods Botswana which processes sorghum into a nutritional supplement product known as Tsabana.

The product is given to lactating mothers and under-fives in public health facilities. Small processors around the country manufacture sorghum meal.

Sorghum millers have accessed shelves in large retail stores particularly because the product is unique to Botswana and there are competing foreign products as is the case with a majority of products.

Sorghum grain is also used in the beer industry to brew traditional beers; Chibuku and Bojwala jwa Setswana. The brewing of Chibuku is done by Kgalagadi Breweries and Bojalwa Jwa Setswana is brewed in homes especially for special occassions such as weddings.

End Markets

Main products in the milling industry are sorghum meal and bran, a by-product. Bran is used as an ingredient in animal feeds or by farmers directly to supplement their livestock feed, especially during the drought season. Sorghum bran is a common source of crude protein and energy.

7.1.3.3 Opportunities for SMMEs

Ample opportunities exist for more processing of grain milling products, but the biggest impediment is a lack of raw materials (sorghum and maize grain). To address this impediment, government introduced a subsidy programme; the Integrated Support Programme for Arable Agriculture Development (ISPAAD).

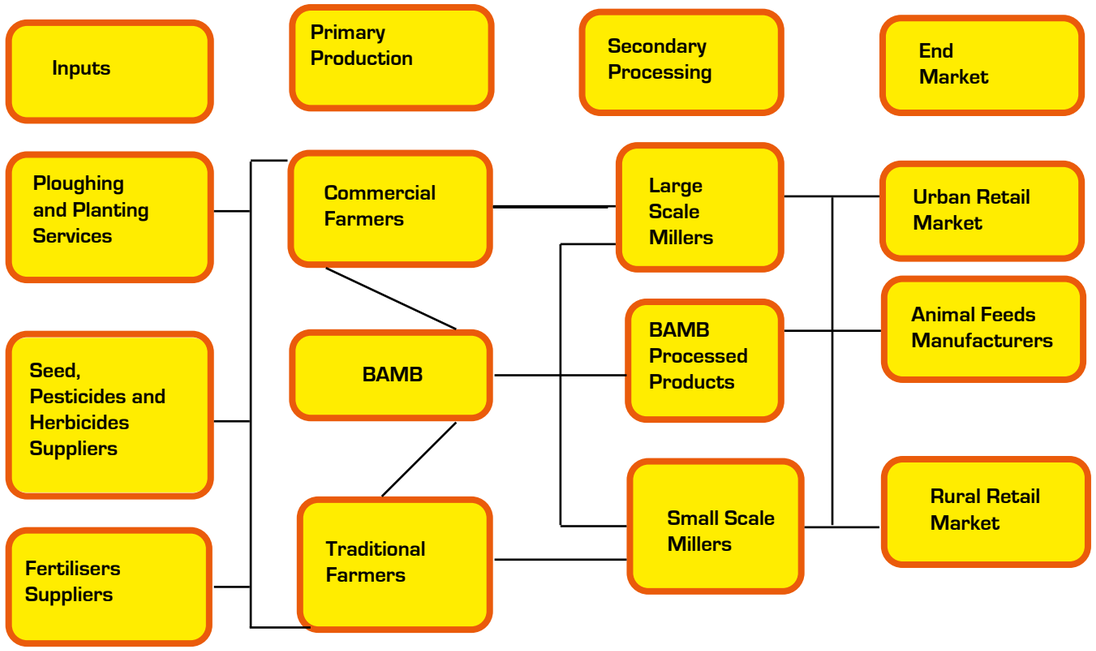
Through the programme, farmers are provided with subsidised inputs (seeds, fertilisers, and pesticides) and ploughing and planting services depending on their scale of operations.

Already, small scale millers have taken up opportunities existing in the sorghum milling industry. One area SMMEs could exploit is to manufacture and supply sorghum based breakfast products and fast foods like mageu and instant porridge. NFTRC can be instrumental to facilitate this and potential market could be South Africa especially amongst those who also have sorghum as a staple.

7.1.3.4 Maize Value Chain

The value chain map for maize is similar to that of sorghum as indicated in Figure 7.4. However, unlike sorghum, maize processing is dominated by large firms most of which are foreign owned. In addition, the bulk of the final products in the maize value chain are imported.

Figure 7.4: Maize Value Chain Map



Support Services:

Regulatory Environment; Transport; Finance' Extension Services; Research; Botswana Millers Association

Inputs

Similar to sorghum, the inputs used at the primary production stage are seeds, fertilisers, pesticides and herbicides, and machinery and equipment for planting and ploughing as well as harvesting. The machinery and equipment used is largely imported.

Primary Production

Production of maize is undertaken by both commercial and traditional farmers. In 2015, 59 holdings reported planting maize in the commercial sector compared to 31,154 in the traditional sector who reported that they planted the same crop. The bulk (73 percent) of maize grain was produced in the commercial sector. Commercial farmers produced 3,792 metric tonnes of maize grain, while the traditional sector produced 1,417 metric tonnes.

Processing

Maize grain can be processed into a variety of products, the main one being maize flour/meal. Unlike sorghum milling, maize milling is dominated by a few large processors such as Bolux Milling and Bokomo.

In addition, most milled products are imported into the country especially from South Africa.

A recent development in both the maize and sorghum milling industries is the entry of a local supermarket giant Choppies. The retailer now sells its branded sorghum and maize mill products. Similar to sorghum milling, the by-product maize bran, is used as an ingredient in the feed manufacturing industry.

End Markets

The main product from the maize milling is sold in retail stores across the country in both rural and urban locations.

Opportunities for SMMEs

Unlike sorghum milling there are limited opportunities for SMMEs in maize processing. The processing industry is dominated by large firms which enjoy economies of scale and hence out compete SMMEs.

Furthermore, the retail market is flooded by branded products from South Africa which SMMEs may fail to replace because of customer brand loyalty.

7.1.4 Horticulture Processing

Horticultural processing in Botswana is still in infancy as the country is a net importer of both fruits and vegetables.

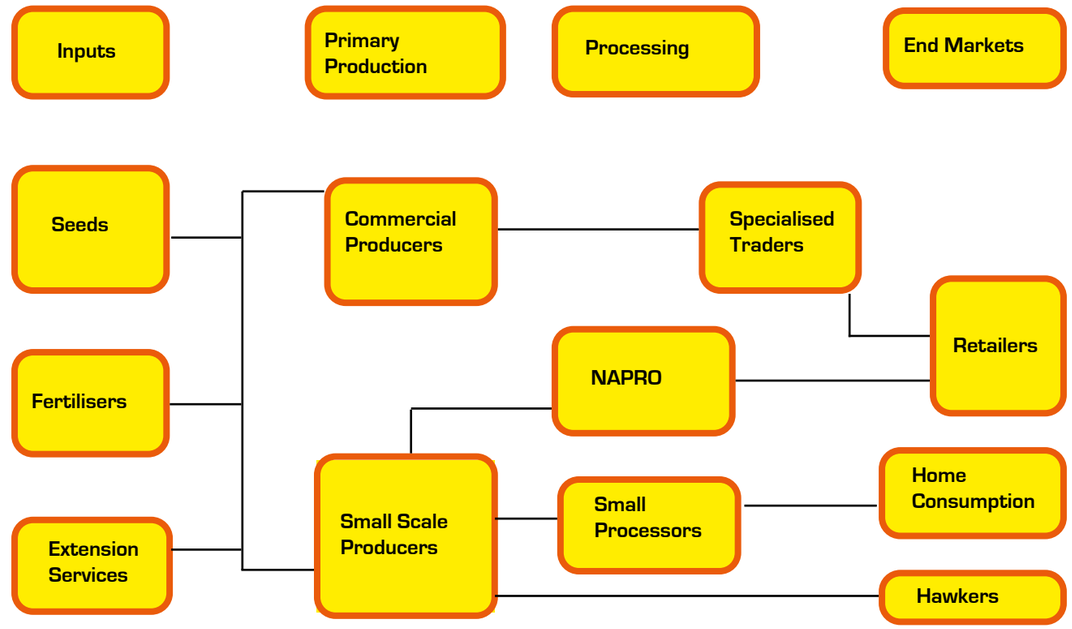
In 2016, the country imported fruits and vegetables amounting to P697 million, while exports were valued at P24 million. This resulted in a negative net trade balance of P673 million.

7.1.4.1 Horticulture Value Chain Mapping

Figure 7.5 shows the value chain map for horticulture. The value chain actors at primary production stage are both small scale and large scale producers.

At the manufacturing stage, there are limited actors with the major one being National Agro-Processing (NAPRO), a company solely owned by NFTRC.

Figure 7.5: Horticulture Value Chain Map



Support Services:

Regulatory Environment; Horticultural Associations; Research; Botswana Horticultural Council; National Food Technology Research Centre (NFTRC)

Inputs

The major inputs used in horticultural production are seeds, fertilisers and herbicides. For support, extension services are usually provided for free through the Department of Crop Production in the Ministry of Agriculture Development and Food Security. One important input is water. Due to its scarcity, it usually limits horticultural production as this production is irrigation dependent. Other inputs include insecticides, herbicides as well as machinery and equipment, which are mostly imported.

Primary Production

At primary production level, there are a few large producers and multiple small scale commercial producers. Although horticultural production has increased over the last decade, production has not been able to meet the increased local demand with the bulk of fruits and vegetables consumed in the country being imported from South Africa.

Production of horticultural products in Botswana has shown a steady increase over the years and the country has been able to cut its import bill on fruits and vegetables.

Processing

There is virtually no processing of fruits and vegetables because of limited local production. The government, through NFTRC, has established a processing plant, NAPRO in Selibe-Phikwe to promote local production and processing of fruits and vegetables. The plant was set up to demonstrate commercial viability of fruit and vegetable processing. However, the plant was met with challenges, key among them being limited supply of raw materials, and inability to penetrate the retail market with its branded products. Nevertheless, some local fruits such as melon (lerotse) and indigenous fruits (morula) which are abundant, have been processed into different products such as jam and pickles. However, product uptake by consumers has been slow.

End Markets

The end markets for processed fruits and vegetable products are retail stores. From the in-depth interviews it became apparent that NAPRO cannot access the retail market as the majority of retail stores prefer the imported popular branded products. Clearly, market access is a key constraint faced by both primary producers and manufacturers.

As indicated in Figure 7.5, most producers sell directly to the retail market as there is no wholesale market after the Botswana Horticultural Market (BHM) collapsed. Government addressed this market access challenge by setting up fresh produce markets (FPMs), but similarly to the BHM, these also collapsed due to poor management.

Market access remains a major challenge for horticultural farmers and manufacturers alike despite the fact that the country relies on imports to meet demand for these products.

The reason for this is that the retail market is dominated by South African retail chain stores and they prefer to source products from South Africa where they have contracted suppliers who produce the quantity, quality, diversity and with the consistency they require which are lacking from the fragmented Botswana producers.

Notwithstanding, some initiatives have been started to address these challenges. For example, Woolworths has started a supplier development programme aimed at assisting producers to consistently produce and supply products of the requisite quality. It is expected that this programme will be extended to the manufacturers of horticultural products.

Additionally, some retail chain supermarkets now produce their own branded products and this presents an opportunity for SMMEs as the retailers are likely to buy from them.

7.1.4.2 Opportunities for SMMEs

There are limited opportunities in the manufacturing of fruits and vegetables as demonstrated by NAPRO. This is despite the fact that the country is a net importer of manufactured horticultural products, with imports of processed and preserved fruit and vegetables amounting to P697, 210,407, while those of manufactured vegetable, animal oils and fats amounting to P489,632,889.

The exports of the same products amounted to P23,619,459 and P3, 307,403, resulting in negative net trade balances of P673,590,948 and P486,325,486 respectively. Opportunities for import substitution in this sector exist. However, it can only be tapped if there is substantial improvement in fruit and vegetable production to excess levels where the surplus can be used as raw materials in the processing sector.

As indicated in Table 7.5, the product with the highest trade deficit is fruit juices which amounts to P432 million, followed by vegetable preparations; and fruits, nut, and others at P96 million and P81 million respectively. So, opportunities exist in the horticultural manufacturing both at primary production and processing levels.

Table 7.5: Imports of Selected Processed Fruits and Vegetables - 2018

Product	Import (BWP)	Exports (BWP)	Net Trade (BWP)
Fruit juices	436 006 801	4 428 617	-431 578 184
Vegetable preparations	106 776 404	11 208 613	-95 567 791
Vegetables, cooked or uncooked	84 751 310	3 743 656	-81 007 653
Fruit, nuts and other	47 417 153	248 355	-47 168 798
Jams, fruit, jellies, marmalade	15 394 947	78 886	-15 316 062
Total	**690 346 615**	**19 708 127**	**-670 638 488**

Horticultural manufacturers can only succeed if they have market access. This requires extensive marketing and promotion, skills SMMEs may lack. Opportunities exist in fruit and vegetable manufacturing as Botswana is a net importer of fresh fruits and vegetables and their manufactured products. However the opportunity may not be realised owing to shortfall in local production.

Additionally, local products will have to compete with more established foreign brands. So, in the short term there are limited opportunities for processing horticultural products for SMMEs and large companies.

However, there are niche markets in developed countries for speciality foods manufactured from indigenous products. In light of the above analysis, developing a fruit and vegetables export sector which encompasses value added processing and niche agriculture are real opportunities which the industrial policy could target and SMMEs exploit.

Developed country markets, though lucrative, can pose entry problems with demands for high quality standards and consistency of supply.

For producers to exploit these opportunities, government agencies mandated to promote exports and develop food products should undertake specialised and focused research to reveal possible opportunities, identify constraints and challenges, and propose solutions. Once done, then SMMEs can produce in strict adherence to developed country market requirements.

Further opportunities exist in the upstream at primary production as demonstrated by the steady increase in production. For farmers to exploit these opportunities, they should engage in collective action initiatives such as clustering and cooperatives.

These can reduce unit costs of production and improve their bargaining power when they approach the market. Clusters or cooperatives could be formed in areas with sufficient water resources, both surface and ground.

7.1.5 Mineral Beneficiation

Botswana produces a variety of minerals, diamonds and coal are the major ones. In addtion, the country is one of the leading producers of rough diamonds by value.

7.1.5.1 Diamond Value Chain Mapping

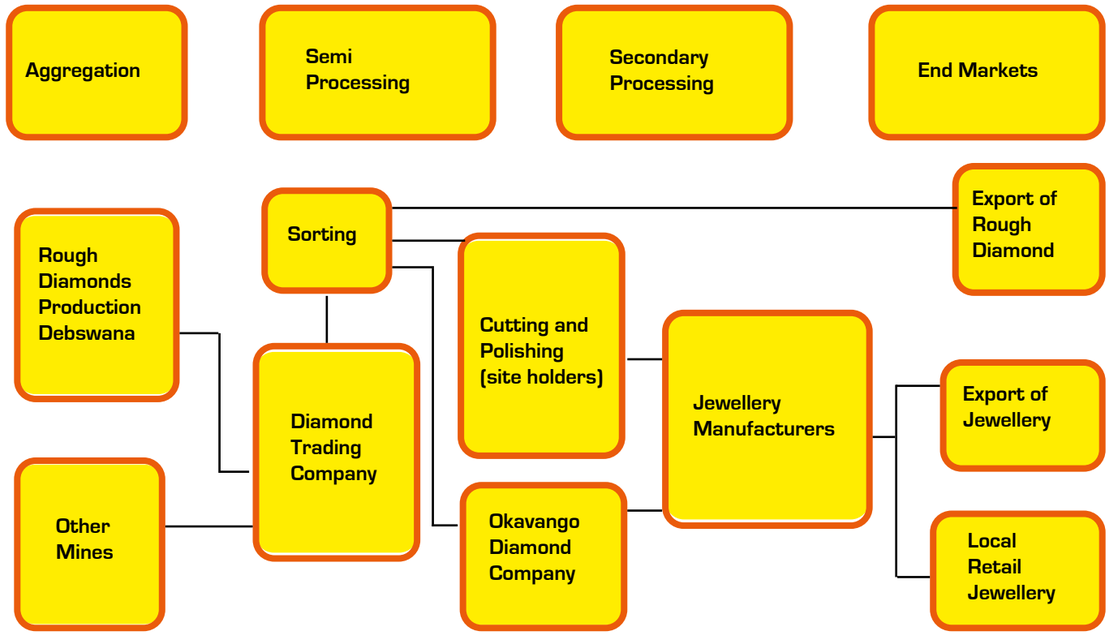
In 2016, Botswana exported jewellery worth P4 billion, while imports of the same product were recorded at P507 million, resulting in positive net trade balance of P3.9 billion.

Support Services

Support services in the diamond industry include policies and the regulatory environment. Diamond manufacturers are exempted from paying value added tax (VAT) and pay 15 percent corporate tax as other manufacturing enterprises.

Another support structure which is critical to diamond manufacturing is the Diamond Technology Park which provides a secure place to operate given the high value of the products they hold. Site holders and jewellery manufacturers have associations which advocate for conducive operating environment for their members.

Figure 7.6: Diamond Value Map



Support Services:

Regulatory Environment; Botswana Diamond Manufacturers Association; Botswana Jewellery Manufacturers Association. Diamond Technology Park; Transport

Inputs

Inputs for the diamond value chain include machinery used for mining diamonds as well as for exploration, both of which are imported. Jewellery manufacturers also use other inputs apart from diamonds such as gold, platinum and so on. Machinery used to cut diamonds is all imported from India and Israel.

Rough Diamond Production

The main producer of rough diamonds is Debswana, a joint venture between the government of Botswana and DeBeers. There are other companies operating smaller mines which produce rough diamonds as well. Debswana is, however, the only mining company allowed to export rough diamonds.

All the rough diamonds are sorted and valued through the Diamond Trading Company Botswana (DTCB) before being sold to DeBeers and Okavango Diamond Company. The diamonds later find their way to the cutting and polishing industry, while others are exported.

Cutting and Polishing

Botswana government decided to beneficiate minerals, especially diamonds, and it lobbied for the transfer of cutting and polishing function from London to Gaborone.

Manufacturing companies were lured into the country through various incentives such as value added tax exemption and a 15 percent tax rate which is applicable to all manufacturing firms who meet certain criteria as discussed in Chapter 3.

A Diamond Technology Park was also established for site holders to operate and it provides requisite security needed by the industry. These companies are referred to as site holders and are allocated a certain quantity and quality of diamonds to purchase a year in advance. In return, the site holders are required to cut and polish 80 percent of their allocated supply of rough diamonds.

The other 20 percent can be sold as rough diamonds. Less than one percent of the cut and polished diamonds are sold locally to jewellery manufacturers and private collectors.

There are currently 21 site holders operating from the Diamond Technology Park. These companies employ an average of 85 people each and the average remuneration is P3, 000.00 for semi-skilled employees who are school leavers trained on the job.

Therefore, the estimated number of employees in the cutting and polishing industry is 1,785 valued at P5, 355,000. Other employees with special skills were sourced from outside the country.

Jewellery Making

The raw material used in the manufacturing of jewellery is sourced locally from Debswana and other rough diamond mines. There are currently 20 jewellery manufacturers in the country. The other raw materials used in jewellery manufacturing are gold, platinum, silver, diamonds, rubies, emerald and semi-precious stones. The jewellery manufacturers source most of their raw materials from outside the country, particularly South Africa.

A small percentage of diamonds are sourced locally because the local cutting and polishing industries are unable to supply the jewellery manufacturers with right sizes of cut diamonds (melee diamonds). Local manufacturers indicated that it was expensive and hence not profitable for them to cut diamonds to small pieces required by the jewellery manufacturers. The industry is highly capital intensive with one manufacturer employing five people, with a turnover of over P1 million and initial capital investment of P10 million.

All the employees are locals, except one. The key challenge facing the jewellery industry is lack of skilled manpower. Nevertheless, Oodi College of Arts is introducing courses in jewellery manufacturing and this is expected to address skills shortage problems.

End Markets

The end market for the diamond value chain are exports of rough diamonds by DeBeers while the jewellery is sold in retail stores. The major market for cut and polished diamonds is Switzerland, which takes over 99 percent of cut and polished diamonds. Site holders are also allowed to export 20 percent of their annual allocation of rough diamonds, with the rest being exported as cut and polished diamonds.

7.1.5.2 Opportunities for SMMEs

Opportunities exist in jewellery manufacturing but these are constrained by lack of skills and high labour costs compared to other jewellery manufacturing countries like India. The diamond manufacturing industry - polishing and cutting as well as jewellery making - is highly capital intensive.

As a result, opportunities for SMMEs are virtually non- existent. In addition, the industry requires specialised skills which can only be sourced internationally.

7.1.6 Textiles and Apparel Value Chain

In the last decade there have been tremendous developments in the textile and apparel industry with government investing and creating programmes to assist the sector.

The industry is prominent for being able to absorb many semi-skilled workers who can earn an income and contribute to the economy (Salm et.al., 2004).

The sector has attracted large investors over the years that were enticed by regional and international trade agreements. The textile and apparel subsector has been propelled by the tariff free benefits gained through SACU, and access to global markets such as EU and the United States, through EBA and AGOA respectively.

Another incentive in the global apparel value chain was the Multi-Fibre Agreement (MFA) established in 1973. Under the MFA, developed countries negotiated bilateral agreements with individual textile and clothing exporters through export quota restrictions aimed at protecting developed country domestic industries.

The quota restrictions limited exports from large developing country exporters and provided opportunities for small developing country exporters of textile and clothing to export to developed countries. The MFA quota restrictions were completely eliminated in January 1, 2005.

Smaller textile and clothing exporting countries (sometimes uncompetitive relative to larger exporters) that had previously enjoyed preferential access to the European Union and United States markets had their preferences eroded.

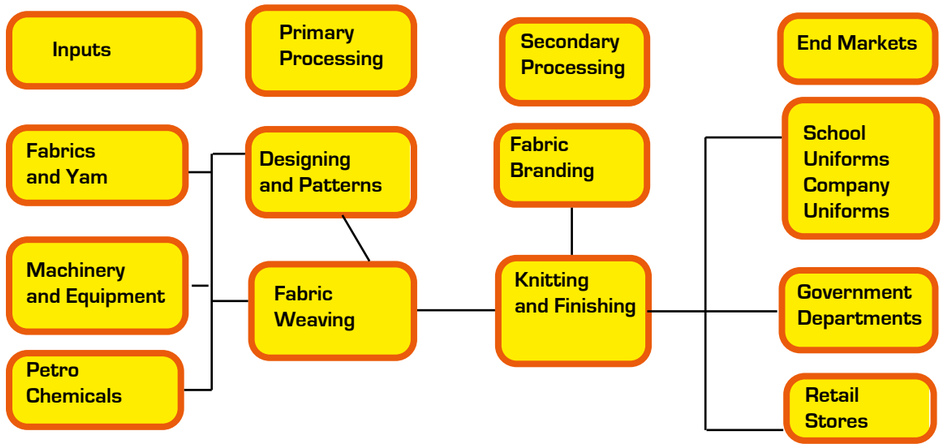
In addition, the level of competition from large Asian countries with well-established textile and clothing industries (which had previously been subjected to quota restrictions) intensified pushing out inefficient producers (including Botswana) from the European Union and United States markets.

Support Services

The textile and apparel sector has been supported by government through the Financial Assistance Policy (FAP) which was terminated in 2001 and replaced by CEDA. According to USAID (2011) many companies used financial assistance from the FAP scheme and when the five-year assistance period elapsed most closed down, while others benefited from the scheme without even starting operations. Therefore, the FAP scheme increased the production of the apparel sector as well as employment.

The scheme provided tax holidays, labour grant incentives and training subsidies. An important lesson for Botswana is that it is crucial to determine the impact of removing support so that appropriate measures could be put in place to protect industries that will be negatively affected. Other support services in the sector include advocacy provided by BEMA and the Botswana Textile Association.

Figure 7.7: Clothing and Apparel Value Chain



Support Services:

Botswana Exporters and Manufacturers Association; Botswana Textile Association; Transportation; Research and Development; Education and training.

The inputs used in the textile and apparel value chain such as fabrics and yarn are a product of another value chain – cotton. The cotton value chain itself is global in nature. Thus, the inputs used in textile manufacturing in Botswana are imported from other countries as there is no cotton production and processing in the country.

Processing

According to USAID (2011) apparel production is a mobile, highly competitive industry, sensitive to changes in the business environment, country incentives and international trade agreements. Apparel production is highly labour intensive and therefore sensitive to changes in the wage rate. Since the elimination of the MFA, the processing sector has declined both in terms of production, exports and employment. Government tried to assist the industry by paying part of the wages, but has since stopped. This resulted in a number of companies relocating to countries such as Lesotho where wages are lower and there are numerous incentives provided by the Lesotho National Development Corporation. These include provision of serviced industrial and commercial sites at competitive rentals; financial assistance to investors on a selective basis; investment facilitation services; assistance to procure all permits and licenses; assistance in company registration; assistance in industrial relations issues; and appraisal of investment projects. Other incentives include tax concessions for manufacturing companies (including zero percent tax) on income tax generated from exporting manufactured goods outside of the Southern African Customs Union (SACU); a permanent maximum manufacturing tax rate of 10 percent on profits; no withholding tax on dividends distributed by manufacturing companies to local or foreign shareholders; free repatriation of profits derived from manufacturing companies and unimpeded access to foreign exchange. The greatest challenges at the manufacturing stage is that of low labour efficiency, leading to uncompetitive products in the international markets. According to local manufacturers, the quality of products produced is good and compares well with imported products, however this has to be tested through comparative benchmarking and operational studies. Local manufacturers state that local products cannot compete in prices.

Some large firms are however able to export their products, partly because they enjoy economies of scale and therefore are able to lower the per unit costs. The manufacturing sector is thus mainly composed of firms that supply the local market especially through government tenders. As indicated in Figure 7.7, these firms also supply school uniforms and corporate wear. Some SMMEs supply consumers directly with items like traditional dresses such as mateise and suits especially for occasions such as weddings.

End Markets

Most SMMEs survive on government tenders through preferential procurement schemes such as EDD. Thus, the end markets for the textile and apparel sector are government, corporate sector and uniforms for schools and parastatals, with very little going to the retail market.

Opportunities for SMMEs

In 2018 exports in the textile industry totalled P280.2 million, an increase from the previous year's 181.5 million (Statistics Botswana, 2019). However, there has also been an increase in imports in the sector during the same time period (1,8 billion in 2018 to 1,6 billion in 2017).

Statistics Botswana recorded decreases in formal employment in the sector over the years; in 2014 the sector employed 5,728 workers and this dropped to 4,733 in 2018. In 2016, Botswana opened its first textile training institute which is meant to address the skills shortage in the industry. This demonstrates continuing development of the sector.

As discussed earlier, the textile industry in Botswana is faced with challenges, the major one being lack of competitiveness. The sector is unable to produce products at competitive prices and, therefore, cannot sell its products in the retail market. The sector has relied heavily on preferential procurement from government and tenders from companies to supply work clothes.

Although the country is a net importer of apparel with imports amounting to P945,282,976 and exports valued at P101,346,290 in 2016, it is doubtful that under the current condition SMMEs can tap into these opportunities in the short term. The sector needs to improve its labour and operational efficiency if it is to compete in the international market.

The only opportunity available for SMMEs is the local market of traditional dresses and supply of government tenders through preferential procurement. Moreover, in the long-term it is apparent the sector can only be resuscitated by improving incentives as demonstrated by relocation of firms to countries with better incentives such as Lesotho.

Opportunities exist in this sector, as demonstrated by the success of other producers in the SADC region (Lesotho, Swaziland, Madagascar and Mauritius), but for Botswana to join them it would require an intensive industrial policy drive from the government and associated agencies.

7.2 Regional Value Chains

7.2.1 Manufacturing of Car Parts

At one point, Botswana exported vehicles mainly to South Africa. These exports comprised of heavy duty trucks such as Kamz, Volvo, Scania as well as Hyundai cars. The car assembly plants have since relocated to South Africa because of a variety of reasons, chief amongst them a complaint by South Africa about the rules of origin.

According to Statistics Botswana (2019), vehicle and transport equipment contributed largely towards imports (16.4 percent) and exports (0.5 percent) in 2018. Botswana mostly exports vehicle parts to South Africa which is the largest vehicle manufacturer in Africa. According to BITC (2017) the South African car market is growing at a rapid rate and has been predicted to increase production to 1.2 million cars in 2020 from 550, 000 in 2013.

This creates a great opportunity for Botswana to expand its vehicle part manufacturing. Botswana's location is also a huge advantage over other vehicle part manufacturers because of close proximity to South Africa. This allows for smooth and timely supply of parts.

Botswana and South Africa are also members of SACU which means that Botswana gets duty free access to the South African market. This industry has great potential to expand and contribute more to GDP and job creation.

In order to participate in this industry, firms need to demonstrate ability to produce according to specifications set out by automotive assemblers. Currently, there are two automotive parts manufacturers in Botswana, one is based in Gaborone and the other in Lobatse and both export to South Africa. The plant in Gaborone, Kromberg, is a German family owned business which has been in existence for over 60 years.

It has an annual turnover of P1 billion and employs over 3000 people. Equipment used by the firm together with inputs are imported. Kromberg manufactures and supplies harnesses for German made cars; Mercedes, BMW and VW. All components are imported and assembled in Botswana.

An interview with the management revealed that the company chose to locate their plant in Botswana because of two things; first there was already a plant which was left by a previous car parts' manufacturer who left after incentives elapsed, and second because labour in Botswana is not as highly unionised as in South Africa. The other incentives enjoyed by the company is the 15 percent tax rate for manufactures and the training levy to which the company contributes.

In 2016, imports of motor vehicle parts and accessories totalled P677, 696,748, and exports were worth P74, 471,142, resulting in a negative net trade balance of P603, 225,606. Although there are opportunities to supply the growing South African car market, it is difficult to penetrate the industry as it is highly technical, capital intensive and based on supply chain trust. These attributes may hinder SMMEs participation in this industry unless they first gain access to one of the industry value chains.

7.2.2 Manufacturing of Plastics and Plastic Products

Africa's plastic industry has grown rapidly due to the demand of plastic goods in the continent. Plastic is an adaptable and handy material that is lightweight and durable and used on a daily basis in every industry. Plastic products imports have doubled in the past six years and are expected to grow even more.

The plastic industry in Africa faces challenges of domestic products competing with imports, poor support from governments, lack of innovation in new materials by manufacturers and a shortage of good infrastructure to boost manufacturing. Botswana's demand for plastic consumption has increased as well.

There are a few plastic manufacturing companies in the country such as Kgalagadi Plastics and Nampak liquid Botswana that have kept the plastic industry running but are faced with the same challenges as the rest of Africa.

There are about 10 plastic manufacturers in Botswana which mainly manufacture plastic bags. Others such as Flotek have been able to export and set up plants in the region. This particular firm exports 85 percent of its products, while the rest is supplied locally.

This is despite there being no incentives for export. The advantage with Botswana is that it is strategically located in the centre of Southern Africa. However, the industry faces challenges like skills shortage. The country does not have plastic engineers and hence such skills are imported; and the Environmental Impact Assessment takes too long to complete when a company sets up in the country. The industry also faces operational space challenges. An industrial park for plastics could alleviate these problem and attract more companies to invest in the country.

Raw materials used in plastic manufacturing are by-products of the petroleum industry and are sourced from South Africa, USA and Thailand, while machinery is sourced from India, Germany, China and Thailand.

In 2016, the country imported P938, 415,804 worth of plastic products and exported P301, 974,338 resulting in a negative trade balance of P636, 441,466. This suggests that opportunities exist to produce more to satisfy local demand. With limited skills in the sector, SMMEs are unlikely to tap on this opportunity and only foreign firms, usually large, which bring skills are likely to be successful in this industry. For the SMMEs to be able to exploit opportunities offered by this industry, the country needs to train personnel in skills required by the industry.

7.2.3 Manufacturing of Chemicals and Chemical Products

The chemical industry has performed well in developed countries and in the United States of America it is estimated that each chemical industry job creates 7.5 jobs elsewhere in the economy as it contributes vastly to downstream value chains internally and externally (Penfold, 2015). Africa has been identified to have great potential in growing the chemical industry, especially Sub Saharan Africa.

South Africa has the largest chemical industry in Africa and it is much diversified in the types of chemicals produced. The South African chemical sector is also predicted to grow by 2-4 percent per annum for the next decade (Majozi and Veldhuizen, 2015).

In Botswana, the industry is nascent. For the year 2016, trade balance for the sector stood at negative P 246 million. The import bill for 2018 recorded importation of chemicals and rubber products to amount to 9.5 percent of total imports (Statistics Botswana, 2019). Chemicals are used mostly by the mining sector. The high consumption of chemical products demonstrates existence of opportunities and that revenue could be generated by manufacturing chemicals within the country.

Raw materials used in the industry comprises an assortment of chemicals which are sourced from South Africa. The production process entails mixing different chemicals with water to make cleaning products. Packaging is also imported from South Africa. The main buyer of the products is government and small quantities are sold to cleaning companies and individuals. The products are not sold in the retail stores because they cannot withstand competition from established brands.

The challenge faced by manufacturers is transportation logistics in sourcing raw materials. Similar to other value chains opportunities exist for SMMEs to participate especially at the manufacturing stage. The major impediment for local SMMEs appears to be market access, therefore there should be concerted efforts to improve market access for local chemical manufacturers, especially SMMEs.

7.2.4 Manufacturing of Soda Ash Products

In 2016 Botswana was recorded as the 4th largest producer of soda ash in the world after the United States, Turkey and Kenya, and it is considered the largest exporter in the SADC region (Jefferis, 2016). Soda ash is an alkali chemical refined from soda carbonate bearing brines. It is mostly used in the glass manufacturing industry to make glass sheets and glass containers, it is also used in chemicals, detergents, metals/ mining and paper productions. In 2014 Soda ash contributed P731.45 million to GDP (Jefferis, 2016), and in 2019 it contributed P53.3 million (1.3 percent) to exports (Statistics Botswana, 2019). According to BITC, the country produces more than 280 000 tons of soda ash per annum and the bulk of it is sourced from Makgadikgadi Salt Pans and transported to South Africa via railway then distributed to customers using tankers.

Botswana's soda ash is mostly used to produce glass and chemical products. Around 66 percent of the country's soda ash is used by major glass manufacturers in South Africa, while 20 percent is used by Zimbabwean glass manufacturers. Given that the country produces large amounts of soda ash which is used to produce products that the country imports such as glass, table and coarse salt, it is important to determine the feasibility of establishing further processing of the product. However, such processing might need huge capital investment which SMMEs cannot afford. For example, opportunities for the SMME sector might lie in the production of products such as table salt which the country imports in large quantities.

7.2.5 Manufacturing of Pharmaceuticals, Medical and Botanical Products

The pharmaceutical market in Africa is estimated to grow by more than 200 percent between the years 2012 and 2021 (Lucchini, 2018). Africa's tropical climate makes the continent a hub for disease. Over the years we have observed an increase in diverse illnesses which has increased the demand for chronic drugs. Sub Saharan African (SSA) countries have been seen as most susceptible to infectious diseases (UNIDO, 2012).

The pharmaceutical industry is very capital intensive and manufacturers need large investments. Therefore, the different players (manufacturers, government, private sector, training institutions, and medical regulatory authorities) in the economy need to make the necessary investments for the industry to grow and conform to international standards.

Africa has very limited manufacturers of active pharmaceutical ingredients, except for South Africa, Ghana and Egypt. The few companies that exist in the sector deal mostly with final formulation and packaging of drugs.

The Pharmaceutical Manufacturing Plan for Africa (PMPA) was formulated by the African heads of state and adopted in 2007 with the aim to contribute to the growth of the sector by promoting industrial and economic developments in Africa and creating sustainable supply of quality drugs in order to improve public health (UNIDO, 2012).

Botswana does not have an active pharmaceutical industry and does not manufacture any drugs for human consumption. However, it manufactures drugs for livestock. The largest manufacturer of livestock medicine in the country is currently Botswana Vaccine Institute (BVI) and it exports to over 15 countries in Africa and the Middle East. This creates an opportunity for government support to expand this subsector.

7.3 Summary of Quantifiable Opportunities for SMMEs

Opportunities in the manufacturing sector can be identified in two ways, first whether there is potential for import substitution and second, whether there are available raw materials to manufacture products for sale both locally and internationally.

As indicated in Chapter 6, all the manufactured products have a negative trade balance, except for jewellery and meat and meat products. This suggests that for most manufactured products there are opportunities for import substitution. However, as discussed elsewhere in this report SMMEs fail to take advantage of these opportunities because of a variety of reasons, one of which is market access especially at retail level. This is particularly true for branded products which form the majority of manufactured products.

Opportunities in the leather and leather products sector could be fully exploited in the short, medium and long-term and the success of this lies on the construction of the leather park. In the short term, hides and skins could be processed into wet blue stage and exported while infrastructure and other logistics for the leather park are still being put up. The entry level for SMMEs in the leather value chain is at the tanning and manufacturing stage of leather products as well processing into wet blue stage.

However, there will be other opportunities at the collection stage, which is not necessarily manufacturing. The leather value chain could be linked to regional markets as other countries which do not have processing facilities will export their raw hides and skins to Botswana for further processing. This is important particularly at the time when the beef industry in the country, which is the major source hides and skins, is facing challenges which have led to a decline in national herd numbers. The LEA feasibility study review has noted that for the Leather Industry Park to be viable there might be need to import hides and skins if the current production levels in the livestock sector remain as they are.

According to CEDA manufacturing supply chain report, the Agency has financed leather products businesses in five of its 11 branches across the country indicating that SMMEs have taken the opportunities presented by the leather manufacturing sector. It is expected that more SMMEs will enter leather manufacturing after the establishment of the leather park.

The animal feeds sector also presents some opportunities through import substitution worth P396, 302,496. Currently there are four feed manufacturers all originating from South Africa. With government promoting production of fodder, through ISPAAD, opportunities exist for SMMEs in feed manufacturing. Most small scale feed manufacturers in the country operate seasonally because they rely on their harvested crops.

Opportunities in feed manufacturing could fully emerge in the medium to long-term as there is need to produce more fodder. In addition, SMMEs could use imported raw materials to manufacture animal feeds. CEDA has not financed any feed manufacturers as depicted in its manufacturing supply chain presentation.

The reason for this might be that the current animal feed manufacturers are foreign owned and therefore not eligible for CEDA funding and that local SMMEs are not aware of the opportunities in the feed manufacturing sector.

The grain milling industry offers opportunities for SMMEs in the short-term and some SMMEs have taken advantage of these opportunities. In fact, CEDA has been active in this sector as the Agency has funded businesses in nine branches out of 11 branches across the country.

However, the country still has a deficit of grain milled products valued at P162 million. This is particularly true of other milled products such as maize and wheat which are dominated by South African companies, except for sorghum products. SMMEs may not have the capacity to compete with maize milling branded products and the focus should be on sorghum milling which has been able to penetrate the retail market without difficulty as there is no competition from foreign products.

Another sector which CEDA could consider funding is the speciality foods, especially those produced from indigenous products with medicinal properties. This sector is on the priority list of the Southern African Trade Hub under AGOA support. There are numerous indigenous products which could be processed and sold to niche markets in the developed countries.

For this to be successful, SMMEs need to partner or form joint ventures with firms originating in countries they wish to export to. This will facilitate ease in export logistical arrangements as well as meet market requirements.

In the short term, opportunities in horticultural processing are limited as can be attested by the failure of NAPRO. This is despite the fact that the country is a net importer of processed fruits and vegetables. However, opportunities exist at primary production level as stated earlier.

7.4 Support Services for the Uptake of Opportunities in Identified Priority Sectors

The extent to which SMMEs can take up opportunities within the priority manufacturing subsectors depends on several factors, one of which is technological progress. As countries move towards the fourth industrial revolution, SMMEs in Botswana should also do the same in order for them to be competitive. According to the Vision 2036 document (Government of Botswana, 2016), Botswana aspires that the manufacturing sector should produce commercially viable, high value products targeted at export markets. The Vision goes on to say: "we will develop and deploy a skilled labour force using appropriate technology to add value to natural and imported resources to create high value products".

To take opportunities in the manufacturing sector in general, and in the identified value chains in particular, SMMEs need to employ certain technologies in order for them to be competitive. As mentioned in Chapter 5, most SMMEs indicated that they used old methods of production which were not only inefficient, but were also slow and hence produce too few products within a given space of time. Therefore, technological advancements, especially industrial technology are crucial if SMMEs are to take opportunities presented in the identified value chains as it contributes to productivity as well as product quality improvement.

To achieve technological advancement, Research and Development (R&D) institutions should form close collaborations with each other and SMMEs in order to develop appropriate technologies in identified value chains which SMMEs could easily adopt in their production processes. This will enhance efficiency, productivity, as well as SMME capacity and lead to the production of high quality goods in sufficient quantities. Therefore, the institutional value chain depicted in Chapter 9 should be well developed so that it functions well. This will result in technically progressive and more competitive SMMEs which are able to access both the local and export markets and hence achieve the Vision 2036 aspiration of having a manufacturing sector that uses appropriate technology to produce commercially viable products for export markets.

His Excellency the President has constituted a Transformation Team whose mandate is to facilitate the aspirations of Vision 2036 of transforming the country into a knowledge based economy so that it attains a high income status. The Transformation Team has sub-teams each working on one of the four pillars of the Vision. The appropriate pillar for SMMEs is Pillar 1; Sustainable Economic Development. This pillar talks to the informal sector, the micro and small enterprises, the manufacturing sector and other economic sectors such as agriculture, mining, tourism, services and creative industries where SMMEs could participate. The sub-team has not yet come up with strategies to develop the SMME sector. It is imperative for the sub-team to come up with clear strategies for the development of the SMME sector. Formation of the National Council on SMME Development is one such strategy that can propel the SMME sector to higher level of performance, including the manufacturing sector.

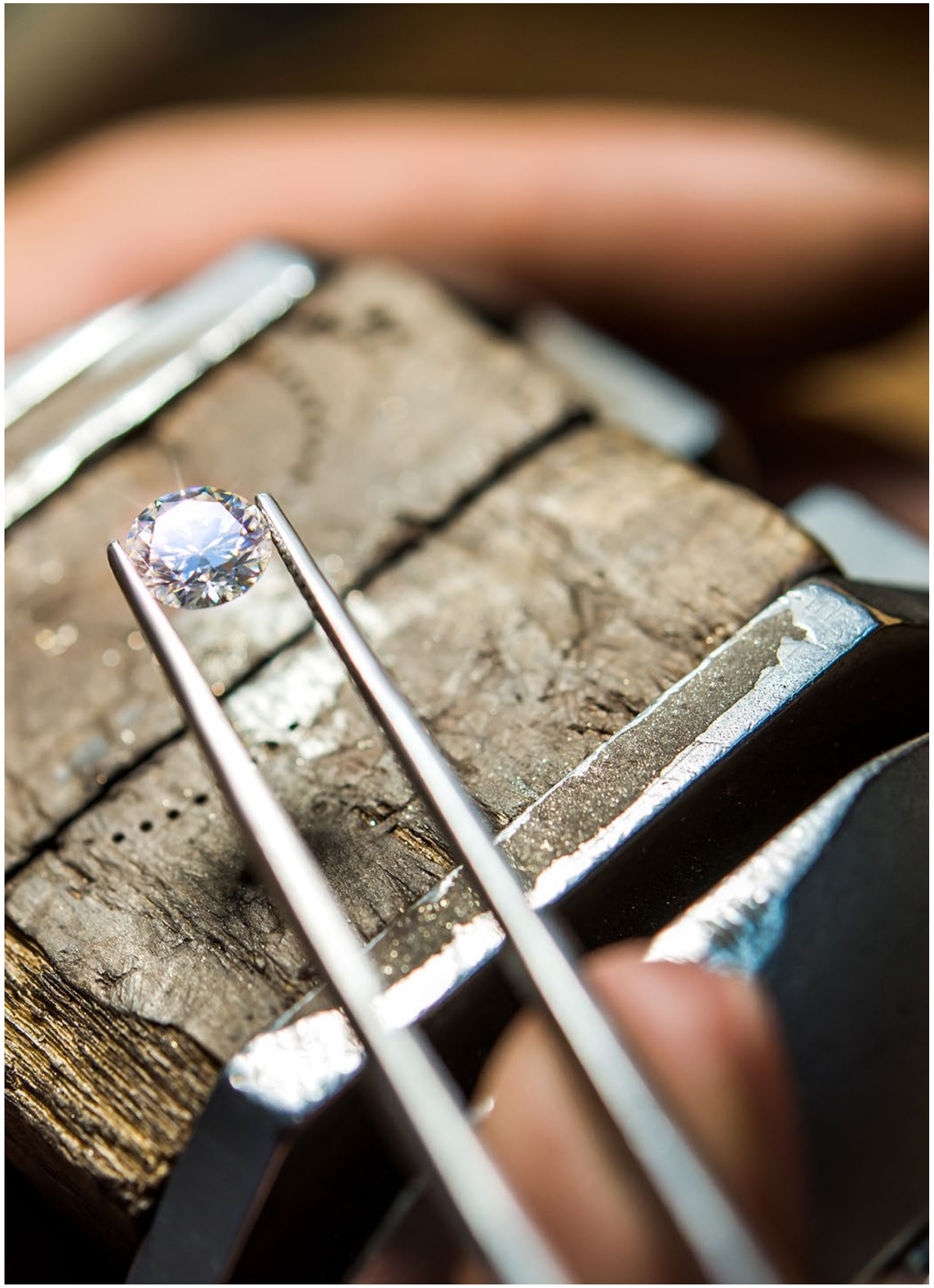
7.5 Conclusions

The identified value chains have been categorised into local value chains which involve the whole production process from raw materials to finished products; and regional value chains which are characterised by the production of raw materials locally to be used for the processing of final products in other countries, particularly South Africa.

Under local value chains, numerous opportunities exist for manufacturing sector SMMEs. The beef and jewellery value chains were the only two sectors discovered to have a positive trade balance. Therefore, opportunities exist to increase exports of manufactured products in these value chains because there is an abundance of raw materials locally. The raw materials can also be increased by unlocking bottlenecks in the value chain in order to stimulate primary production. For other value chains, imports far exceed exports implying that there is enough market locally to absorb products from these value chains. This presents an opportunity for manufacturing SMMEs to increase their production to meet local demand and eventually export to foreign markets.

The value chains which CEDA should consider focussing on are leather and leather products, animal feeds, grain milling, horticulture processing and speciality food products. Other value chains are linked to regional value chains, and these include soda ash, automotive parts, and chemical and chemical products. For soda ash the raw soda is exported to South Africa for further processing into a variety of products which are later sold back to Botswana as imports. This, therefore, means there might be opportunities in the medium and long-term for further processing of soda ash into finished products for both the local and export markets. This can only be possible if the supportive infrastructure and policies are implemented, as it was done in diamond beneficiation. Opportunities are also available in the beneficiation of coal which can be used by local manufactures to produce chemicals for both the local and export markets.

While there exist numerous opportunities in the value chains identified for the manufacturing sector SMMEs to fully benefit, there should be concerted efforts to remove bottlenecks that inhibit full production potential. This should include supportive policies and a conducive business environment under which SMMEs operate.



CHAPTER 8

CEDA support structure for the manufacturing sector and criteria for competitive SMMEs

The importance of provision of business development services for SMMEs has long been recognised by governments and development partners as financial support alone is not sufficient to achieve sustained competitiveness (UNCTAD, 2005).

According to UNCTAD (2005), business development services encompass all types of SMME support services, including training, consulting, technical and managerial assistance, marketing, physical infrastructure and policy advocacy.

These interventions are geared towards assisting small firms to overcome market imperfections and inadequate access to technology, with an endeavour to enhance their efficiency in accessing both domestic and global markets.

Thus, the success of the manufacturing sector enterprises hinge on the support structure offered by the financier and other support institutions. In financing SMMEs it is important to take into consideration not only the viability of the enterprises, but also their competitiveness in order to provide an appropriate support structure for their development.

For SMMEs to be successful, they must be competitive and there must be parameters used to determine SMMEs' competitiveness. These parameters will ensure that appropriate support structures are developed based on each SMMEs needs.

This chapter reviews the CEDA support structure, particularly pertaining to manufacturing sector enterprises and parameters for competitive SMMEs. It further provides clear recommendations for improvement of CEDA support structure, and sets parameters for competitive SMMEs that CEDA could use for appraisal..

8.1 CEDA's Human Capital, Financing and Advisory Model

CEDA was established by the Botswana government to provide financial and technical support for business development to promote viable and sustainable citizen owned business enterprises.

The Agency was established to address the need for coherent and holistic support in the development of small, medium and large scale enterprises by offering loans at subsidised interest rates.

Therefore, its mandate, as a DFI, is to develop entrepreneurship and empower citizens. In the execution of its mandate, the Agency offers a range of products and services among others financing and business advisory across all sectors of the economy, including manufacturing.

In reviewing CEDA's support structure in terms of human capital, financing and business advisory services, this section follows a review of CEDA internal policies, in-depth interviews with CEDA staff and information from CEDA's database on applications.

8.1.1 Human Capital Support Structure

8.1.1.1 Business Proposal Assessment Process

Figure 8.1 gives a summary of stages that an application for CEDA funding follows until approval and funding.

Figure 8.1: Stages of Business Application Approval

Stage 1: Proposal submission by client	• Proposal submitted to Customer Advisory Services • Loan application allocated to relevant Portfolio Executive (PE)
Stage 2: Compliance and Technical Assesment	• PE reviews the application for compliance issues • One-on-one interview between the PE and the applicant • PE drafts a report on the application and submits to Branch Manager
Stage 3: Visibility and Credit Assesment at Headquarters	• Branch Manager makes their own assessments and send the report to the Credit Department • Credit Department assesses the bankability and risk of the proposal
Stage 4: Management Investment Committee (MIC) Assesment	• The proposal is sent to the MIC where a final recommendation on the decision is made. • The MIC has 6 members
Stage 5: Post Decision	• The PE contacts the applicants, processes all legal documents • Fund Disbursment • Monitoring and Tracking by (PE)

Source: Author Constructed Based on FGDs CEDA Staff

8.1.1.2 Number of Personnel

The Portfolio Executives (PEs) play a central role in the assessment of business proposals, especially in stages 1, 2 and 5. As per the CEDA structure in 2018, the Agency had employed a total of 40 PEs, and 29 Business Support Officers (BSOs). The BSOs provide first hand support to PEs and in the absence of the PEs the BSO assumes that role.

It is expected that in all the branches except Gaborone, there should be one PE assigned to the manufacturing sector, while in the Gaborone branch five PEs should be assigned the manufacturing sector. This makes a total of 15 manufacturing PEs.

The total number of applications for all the sectors (Manufacturing, Agriculture, Property and Services) received in 2018 were 1,960, thus on average 1 PE handled 49 new applications.

Out of the 1,960 applications received, only 121 (6.17 percent) were in the manufacturing sector, implying that on average one manufacturing PE handled 8 new applications. In terms of appraisal of manufacturing business proposals, a sizeable proportion (48 percent) were closed down at branch level due to non-compliance (at stage 2), 12 percent were rejected (at stage 5) and 40 percent of the applications were approved (at stage 5) with total funding amounting to BWP 31.8 million. This accounts for 5.35 percent of the total amount allocated to all the sectors in 2017/2018.

8.1.1.3 Skills of Personnel

The human capital skills needs of the manufacturing sector are wide and in some instances complex. Therefore, in addressing skills needs, a number of factors should be considered. The majority of PEs have skills ranging from business accounting, economics and other social sciences.

Although the majority of the PEs at CEDA have a wealth of experience in the work they do, they appear to lack technical skills set required for the manufacturing sector such as product development and product quality skills. This is despite the fact that they are the ones who do the bulk of initial proposal assessments.

It is, however, important to note that where PEs feel they do not have technical skills required to assess a particular proposal there is a provision that they can outsource technical assistance (business advisory services).

This process is outlined in the CEDA business advisory manual. However, the current process is faced with challenges, among them:

- The pool of business advisors is small and most of the listed advisors are not technical experts, rather they possess broad business/financial/project management and entrepreneurship skills; and
- Poor compliance rate by business advisory applicants as evidenced by the inability to meet the requirements outlined in the call for interest to the general public.

From the foregoing discussion of the CEDA's human structure and internal processes, it is evident that the CEDA's human structure is not aligned well to the changing and unique needs of the manufacturing sector.

For example, the CEDA's business proposal assessment tool remains static and is applied uniformly across all sectors, without taking into cognisance the unique needs of respective sectors.

To this end, it is recommended that CEDA's business proposal assessment tool should be tailor-made for the unique needs of respective SMME categories.

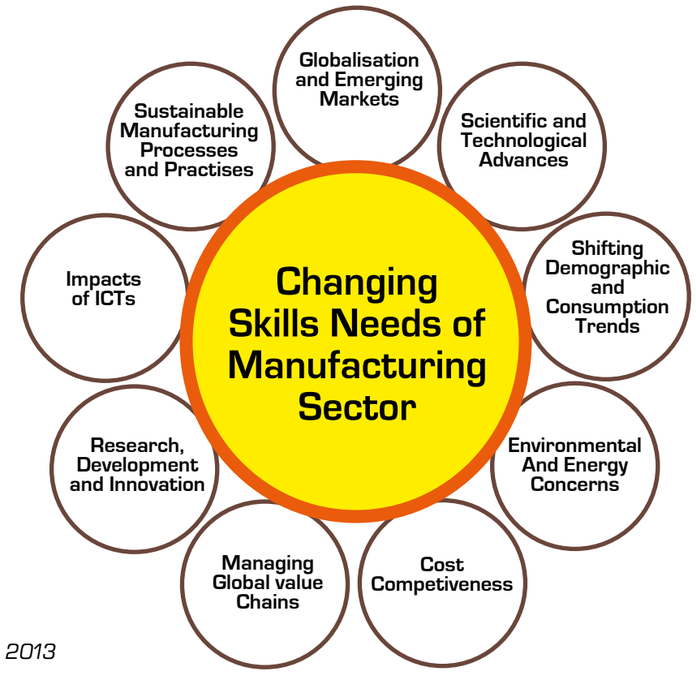
Furthermore, the changing needs of the manufacturing sector require that key personnel possess product development, improvement and product quality skills in terms of certification as well as connecting producers/SMMEs to markets (UNIDO, 2015). CEDA's key personnel is lacking in this regard.

It is recommended that CEDA should evaluate the impact of its activities on a continuous basis, so as to identify skills that are required to propel the manufacturing sector forward.

To this end, Irish Future Skills Requirements of the Manufacturing Sector have identified several skills needed to develop the manufacturing sector (Ireland Forfas, 2013).

Figure 8.2 gives a summary of the requisite skills. It, is therefore, important for CEDA to ensure that PEs relevant for the manufacturing sector possess most of the identified skills set by continuously upgrading themselves.

Figure 8.2: 21st Century Manufacturing Skill



Source: Ireland, Forfas, 2013

8.1.2 Financing

International institutions and foundations, such as the World Economic Forum (WEF), the World Bank, the Tony Olumelu Foundation, and the Barack Obama Foundation accord prospective entrepreneurs an opportunity to present their business proposals verbally to a panel of assessors (normally outsourced personnel with high technical and entrepreneurial skills).

Often this process is referred to as the Delphi Technique - a systematic forecasting method dependant on the opinion of independent experts to determine the validity of an idea. To this end, it is recommended that CEDA should follow suit and afford prospective entrepreneurs the opportunity to present their business proposals verbally to a panel of assessors, in this case, the CEDA Management Investment Committee. This will ensure that both the prospective entrepreneur and the Management Investment Committee are at the same level of understanding, particularly for business proposals that are complex.

For complex manufacturing projects, it is recommended that CEDA's Management Investment Committee should be augmented by independent industry experts during the time of proposal assessment.

CEDA has offices throughout the country, with headquarters in Gaborone, two service point centres (north and south) and 11 branches[1]. All these branches provide the following financial services: (i) Mainline Finance - Long Term Financing where maximum term is 180 months (ii) Trade Finance - Short Term Financing where the maximum term is 12 months (iii) Micro Financing e.g. Mabogo Dinku. For these products, business proposals from across various sectors are received and subjected to the respective CEDA assessment procedures.

CEDA financing is focused on SMMEs including those operating in the manufacturing sector. CEDA charges interest rates of between five and 7.5 percent as well market related rates depending on the size of the loan. Micro enterprises (P500.00-P150, 000.00) and small enterprises (P150, 001.00–P500, 000.00) attract an interest rate of five percent, medium enterprises (P500,001.00-P4,000,000.00) being charged interest at the rate of 7.5 percent, and large enterprises (over P4,000,000.00) are charged prevailing market rates.

The maximum loan amount is P30 million, should a client need financing which exceeds the P30 million CEDA ceiling they will be directed to the Botswana Development Corporation (BDC) which finances mega projects.

3 *Gaborone, Francistown, Maun, Letlhakane, Ghanzi, Kasane, Kanye, Palapye, Selebi-Phikwe, Molepolole, and Hukuntsi.*

According to CEDA guidelines, small and medium sized businesses are required to contribute five and ten percent to the total project costs respectively. However, this is not mandatory.

While for large businesses it is mandatory for them to contribute 15 percent of the total project costs. The repayment period and the grace period varies according to the size of the loan. Micro and small loans have a maximum repayment period of 60 months and a maximum allowable grace period of 24 months.

For medium scale loans, the maximum grace period is 48 months and the maximum repayment period is 120 months. For large loans the maximum repayment period is 15 years and grace period is 24 months. In all instances the grace period does not accrue interest.

It is important to note that both the repayment and grace periods are not dependent on the business sector in which a business operates, rather it depends on the size of the loan. Notwithstanding, depending on the circumstances at hand, grace period length can be extended at the discretion of CEDA management.

Currently, CEDA funds four broad sectors: services, property and manufacturing, agribusiness, and tourism. To meet one of its key objectives of promoting the manufacturing sector, CEDA has, in the past two years, undertaken to allocate the manufacturing sector a certain portion of its loanable funds.

Twenty five percent of total loanable funds during financial years 2018/19 and 2019/20 were allocated. The stipulated threshold is solely for the manufacturing sector as CEDA took the initiative to separate property from the manufacturing sector in the last two financial years.

Although the Agency sets aside a certain proportion of its loanable funds specifically to the manufacturing sector, the downside of this strategy is that the bulk of prospective manufacturing firms are not forthcoming with applications for loans.

CEDA should therefore embark on an awareness campaign to prospective entrepreneurs about opportunities in the manufacturing sector in order to stimulate interest for subsequent loan applications. In 2017/18, only 6.17 percent of applications received by CEDA were from the manufacturing sector, a meagre 5.35 percent of the total loanable funds that year.

This is in stark contrast with the services sector, which made up 71.63 percent of the applications received in 2017/18, and over half of the loanable funds (55.22 percent).

FGDs revealed that firms considered limited capital/finance as a significant constraint to their expansion. Respondents suggested that financing provided by CEDA only partially meet their needs and that collateral requirements are burdensome.

FGDs recommended that CEDA should consider that start-ups require to be recapitalized during the business life cycle and, therefore, should be prepared to re-finance operating businesses.

To address finance issues related to start ups, viewpoints from stakeholder interviews suggested that CEDA should only finance start-ups as there are more likely to face difficulties to access credit from commercial banks.

According to stakeholders, CEDA should pave the way for commercial banks to finance expansions. So, existing firms should migrate from CEDA to commercial banks rather than get repeat loans from CEDA to finance expansions. They argued that CEDA should have a graduation programme which is dependent on the type of sector, product and performance of the SMME. This, they suggested, will ensure CEDA's financial sustainability.

While this may be a noble strategy, it may not be appropriate as firms have indicated that they lack finance for business expansion even from the commercial banks. Therefore, CEDA should continue to fund business expansions to increase capacity of local firms to the level at which they are able to expand and participate in export markets. Additionally, focussing on start-ups only may compromise CEDA's financial sustainability as such businesses have high failure rates.

Technology is crucial for manufacturing enterprises to be successful. Accordingly, financing technology development and adaptation is critical as it enhances the competitiveness of manufacturing sector SMMEs (UNCTAD, 2005).

Even though competitiveness should be viewed as a long-term strategy for enhancing SMMEs' productive capacities, the CEDA Credit Policy (CCP) is silent on the issue of technology financing. Consequently, technology-based firms are not catered for financing.

Technology financing cropped up during stakeholder interviews. Growth of the manufacturing sector is dependent on continued changes in technological innovation, and research on new production and business processes.

New and improved technologies have proven to be the key contributing factor to business performance; reduced production costs and improved product qualities.

In line with the benefits of using modern technology, Botswana government developed the IUMP to address the lack of sophistication in local products. Unfortunately, the IUMP has been undermined by a lack of funds. It is, therefore, recommended that government fast-tracks implementation of the IUMP by identifying and analysing financing options.

In-depth interviews revealed that in an effort to spearhead the role of finance in SMME's ability to acquire and diffuse technology, the question remains who should finance it.

Some stakeholders maintain that CEDA should finance it, while others feel government should take the responsibility to create an enabling financial infrastructure.

Discussions have commenced at the national level to use factoring and collateral registry as mechanisms of enhancing SMMEs' access to finance. However, development of financial infrastructure should be considered such as establishing forms of security to facilitate the use of factoring.

Lessons from other countries could assist Botswana in choosing an appropriate model for technology financing. There are four models that could be adopted for financing technology development: banks and special-purpose lending institutions; technology leasing; stock markets; and venture capital firms.

Banks and special-purpose lending institutions: Commercial banks could play an important role in financing technology-related investments, such as the upgrade of existing machinery by SMMEs as well as acquisition of new technologies.

However, banks will usually avoid technology investments that are perceived as high risk. For example, those that have outcomes that are difficult to value even if successful (UNCTAD, 2005). In Malaysia, some commercial banks have programmes that are designed to assist SMMEs upgrade their operations by availing financing for the purchase of industrial machinery.

In the event that commercial banks find it less appealing to finance technology, special-purpose financing institutions could be created specifically for this purpose.

Technology leasing is increasingly being adopted by developing countries as a possible strategy to facilitate acquisition of advanced equipment by SMMEs to improve their operations (UNCTAD, 2005).

In this financing strategy, modern equipment that is better suited for the SMME production activity is leased by another company, possibly a larger enterprise (the lessor). The lease is based on the cash flow generated by the equipment, and not reliant on the lessee's assets to serve as collateral.

Stock markets can be used in technology financing. This financing strategy requires a well-functioning stock market to enable the country concerned to establish a secondary stock market specifically to help new technology-driven firms obtain equity financing. However, the challenge with this strategy is that developing countries lack well-functioning stock markets.

The use of venture capital firms is another strategy which can be used to finance technology development and adoption. Although this strategy is renowned for promoting start-ups and technology-intensive firms, its success depends largely on a strong entrepreneurship culture, strong university-based research in the sciences and engineering, with strong links to the private sector (UNCTAD, 2005).

In conclusion, out of the four technology-financing strategies discussed above, one that is the most appropriate for Botswana given the country's level of financial development and commercial banks' reluctance to finance start-ups is the technology leasing strategy. However, the feasibility of implementing this strategy in Botswana should be investigated given the limited number of large firms in the country.

8.1.3 Business Advisory Services

CEDA's business advisory model is such that business development services are offered to entrepreneurs in various skills needs as identified through the needs assessment that is conducted during monitoring of funded businesses (Heather and Mark, 2011). It is therefore important to assess if this model has served the needs of the manufacturing sector, in particular SMMEs.

As highlighted earlier, financing alone cannot enhance firms' competitiveness, for SMMEs to realise sustained competitiveness business advisory services such as training and mentoring are crucial. We, therefore, provide evidence from the enterprise survey that relates to how firms perceive the training and mentoring services provided by CEDA.

What emerged from the survey is that only 20 percent of the respondents indicated that they received training and only 15 percent of them received mentoring as additional support from CEDA. Furthermore, 65.8 percent of those assisted by CEDA feel that the support is not adequate.

Survey respondents suggest as a remedy that CEDA should assist with export market penetration, provision of business education (covering both management and financial education), and assistance with land allocation/acquisition for businesses.

The following are shortcomings we identified of the CEDA's Business Advisory Model: First, the needs assessment is conducted after funds are disbursed to enterprises.

This issue was also highlighted during stakeholder interviews, where a concern was raised that CEDA would finance enterprises even before carrying out a needs assessment survey to determine if enterprises have key requisite skills to run the proposed operation.

It is evident that some of the funded businesses do not have the capacity to produce and hence fail to meet orders. This points to possible inefficiencies in CEDA's advisory model as skills gaps should be identified and addressed before the business begins operating.

During FGDs, entrepreneurs suggested a mentoring programme where the managers of start-up firms are attached to successful businesses for a stipulated time period to enhance their business and technical skills.

CEDA should, therefore, develop a mentoring programme which is focused on building capacity on technical skills in the different sub sectors.

The second shortcoming with the advisory model is delayed assessments of business proposals by CEDA personnel. Quizzed about challenges they face in their interaction with CEDA, 28.9 percent of respondents complained that CEDA takes too long to give them feedback on their applications.

Third, there is no synergy in the operations of CEDA and key stakeholders such as LEA and BITC in dealing with capacity issues relating to business development and mentoring of entrepreneurs. This view was expressed by stakeholders who underscored an urgent need to improve business advisory services.

They suggested a coordinated approach to business advisory involving all key stakeholders; CEDA, LEA, BITC, BEMA, commercial banks, technology research institutes like BITRI. They further suggested that CEDA should provide targeted interventions that are based on SMME needs.

Lessons can be drawn from other countries in business advisory services. Business mentoring is one and has been identified as a proven strategy to enable successful entrepreneurs and business managers to pass on their own successful experiences to small and growing firms.

The concept of business mentoring has been successful in the United Kingdom and is now being replicated in other parts of the world, including South Africa. In this business mentoring programme, the key is to link finance and non-financial support. According to UNCTAD (2006), this programme follows the steps below:

- Initial meeting with a selected business mentor, with the whole purpose of building empathy and mutual understanding between mentor and the mentee;
- Diagnostic evaluation phase, where strengths, weaknesses, opportunities and threats (SWOT) analysis and funding requirements of the firm are established;
- Once the mentor and the bank have approved the business plan, and the funding has been established, only then can the business commence;
- Then monitoring and evaluation meetings are undertaken to review the results and performance of the business in terms of sales and the accounts;
- In addition to the monthly review meetings, there is an emergency help-line in place, for instances where the client feels the need to call on his business mentor regarding his latest problem.

Contrasting this business mentoring programme with CEDA's, it emerged from the stakeholder interviews and FGDs that CEDA's mentoring programme has gaps as it is mostly focused on issues such as follow-up on loan repayments. In addition, although the Agency routinely undertakes needs analyses, the support services offered by CEDA are rarely informed by proper market failure analyses. Hence, it is recommended that CEDA develops and implements a holistic monitoring and evaluation system to inform appropriate support services.

8.2 Criteria for a Competitive SMME

ITC (2015) notes the complexity of defining competitiveness because the definition depends on the context (i.e. whether it is national, industry or firm level competitiveness) or whether competitiveness is considered as a relative concept or is viewed as the adoption of best practices.

Since the focus of this study is the SMME, the definition focuses on firm level competitiveness and adopts the ITC (2015) definition of SMME competitiveness.

The ITC (2015) definition of competitiveness applies to all firm sizes and does not distinguish between small and large firms and indicates that the competitiveness of the firm is a composite of its performance in terms of all its products to market combinations.

According to ITC (2015), "competitiveness is the demonstrated ability to design, produce and commercialise an offer which fully, uniquely and continuously fulfils the needs of targeted market segments, while connecting with and drawing resources from the business environment, and achieving a sustainable return of the resources employed" (ITC, 2015: 109). For CEDA to finance an SMME it first has to appraise it and this requires a set of parameters.

This section therefore presents a set of parameters for a competitive SMME that CEDA could use for appraisal. The section reviews approaches to measuring firm-level competitiveness and concludes with recommending one appraisal criteria that CEDA could use to determine firm-level (SMME) competitiveness.

While the review of the internal application assessment criteria used by CEDA to evaluate loan application is important in supporting decision making with regard to financing of projects, it is beyond the scope of this section.

Wattanapruttipaisan (2002) developed a framework on guidelines and parameters for SMME supply side capabilities and competitiveness. The guidelines and parameters are grouped into seven headings each with a set of questions. The parameter on nature and readiness of firm comprises of 12 questions while the entrepreneurial characteristics heading has 13 questions.

The capabilities and competitiveness (10 questions each) approximates the initial conditions of the SMME while the production organisation (11 questions) aspect measures the firm's potential for productivity upgrading and competitiveness growth through innovation-led, learning-based and investment-driven transformation of SMMEs.

The others are finance and human parameters and guidelines each with 11 questions. Wattanapruttipaisan (2002) highlights the following features regarding framework on guidelines and parameters. First, the questions are more appropriate for direct interviews but can be modified to suit other evaluation purposes.

Second, the framework proposes a rating scale of 1 to 5, (1 being the lowest and 5 the highest score) for the answers to the 78 questions.

Third, Wattanapruttipaisan (2002) proposes a relative weight of 20 percentage points for entrepreneurship; 15 percent each for production organisation and finance since these are significant for SMME start-ups, expansions and diversification; weight of 12.5 percent each for nature and readiness of firm, capabilities, competitiveness, and finance.

The second approach to measuring the SMME competitiveness is the SMME competitiveness grid developed by ITC. ITC SMME competitiveness grid is based on three pillars, namely capacity to compete, capacity to connect and capacity to change (see ITC, 2016).

These levels include firm capabilities, immediate business environment and national environment. This section draws heavily from the ITC competitiveness grid as outlined in the 2016 SMME Competitiveness Outlook.

Since the focus of the study is SMME level competitiveness, the discussion will focus on three pillars of competitiveness at the firm level. ITC (2016) highlights the following with regard to the three pillars of SMME competitiveness at firm level.

First, the capacity to compete- a static dimension of competitiveness, deals with the operations of the firm and their efficiency in terms of cost, time, quality and quantity.

Second, capacity to connect, as Poufinas et al. (2018) put it, is concerned with collection and exploitation of information and knowledge. It includes the firm's efforts in terms of dealing with information flow into the firm (consumer profiles, preferences and demand) and facilitation of out-bound information flow such as marketing and advertising.

Third, capacity to connect – a dynamic component of competitiveness involves the firm's capacity to respond to and innovate through investments in human and physical capital (Poufinas, et al, 2018). Examples cited by Poufinas et al. (2018) include the firm's capability in terms of interpreting new market trends, tactics of rivals, and the effectiveness of the firm's positioning to new infrastructure or technologies and government policies.

As the ITC SMME competitiveness grid assesses competitiveness at three levels, namely the firm capabilities, the immediate business environment and the national environment, it links the country's macroeconomic figures with the SMME competitiveness indicators and therefore help countries to identify reform areas on SMME competitiveness at firm level, immediate business environment and the national environment.

This is important since an exclusive focus on SMME-specific interventions while ignoring macroeconomic environment and the business environment may have limited impact on SMME growth.

The third approach to measuring SMME competiveness is the SMME Competitiveness Rating for Enhancement (SCORE) developed by the Malaysian government (see http://www.score.gov.my).

Based on the information obtained from http://www.score.gov.my SCORE has the following features.

First, it is a diagnostic tool that uses SMME performance and capabilities to rate and enhance the competitiveness of SMMEs at firm level. Initially developed to assess the effectiveness of grants offered to companies in the manufacturing sector, SCORE is widely used by various sectors in Malaysia to measure the firm-level competitiveness and capabilities and is used to facilitate market access for firms and also acts as preliminary indicator for purposes of access to finance.

Second, the objectives of SCORE are to: acquire baseline data on SMMEs; assess and track SMME capabilities and performance; facilitate linkages between SMMEs and large companies, government-linked companies and hypermarkets; link export-ready companies with export promotion agencies (MATRADE and MIDA); and, ensure better utilisation of funds.

Third, SCORE is based on assessment criteria on the following components; financial strength, business performance, human resource, technology acquisition and adoption, certification and market presence.

Table 8.1: Malaysian SCORE Rating and SMME Assistance

Firm Competitiveness SCORE Rating	SMME/Firm Characteristics	Assistance Provided to SMME Firms
0-2 Star	Firms that are rated 0-2 Star have very basic manual/semi-automated production processes.	Integrated, hand-holding assistance (Business Accelerator Programme, SMME Financing Scheme, SMME University Programme, SMME University Internship Programme, SMME Expert Advisory Panel)
3 Star	Firms in this category are: Semi to fully automated Able to implement quality system Undertakes product and process improvements Intellectual Property Registered Ready for export compliance and certification for export	Development Programmes
4 Star	Firms with 4-Star rating are: Fully automated Investment in process/product/improvements Most likely exporting and have certification for export	Link with LSI/Multinational companies (MNCs)/MATRADE
5 Star	Firms in this category are: High level of automation Good branding/packaging Currently export with compliance to export requirements	Link with LSI/Multinational companies (MNCs)/MATRADE

Source: *http://www.score.gov.my*

Fourth, SCORE offers targeted assistance based on firm characteristics and needs.

The firms are rated and assistance offered in accordance to their rating. Programmes offered to companies that have a SCORE rating of 0 to 2 Stars, include, a Business Accelerator Programme (BAP), SMME Financing Scheme, SMME University Programme, SMME University Internship Programme, and, on-site assistance by industry experts through the SMME Expert Advisory Panel (SEAP). The BAP programme provides assistance which covers assessment of the company to determine its performance and needs, capacity building (training, awareness on branding, certification, etc.), business advisory services, and advisory services on access to finance.

Programmes for companies with a 3 to 5-star rating, include national brand certification, Enterprise 50 (E50) award (a prestigious award programme where 50 winners are selected based on financial capabilities, operations and management competencies), InnoCERT certification that encourages entrepreneurs to venture into high technology and innovation-driven industries, business matching, and, business expansion. The enterprise assistance programmes are summarised in Table 8.1.

Information from the Malaysian government website (http://www.score.gov.my) indicates that the SCORE assessment process involves a firm (SMME) completing an evaluation form; an onsite visit by a trained SCORE auditor; and, production of SCORE results using a software that processes information from the evaluation form and on-site visit.

In terms of the completion of the evaluation form, the firms answer questions on management, financial and technical capability, business performance, operation management, innovation and quality systems.

Firms also have to provide supporting documents such as licenses, certification and compliance to regulation standards and audited accounts with their evaluation form. Interventions are then tailor-made to firm needs depending on their SCORE rating.

Based on the assessment of the three approaches to SMME competitiveness parameters, the Malaysian SCORE appears the most appropriate appraisal tool that government could adopt (with some modifications to cater for local conditions) for SMME competitiveness. This is due to the following reasons.

The first is that the approach is rigorous and entails an assessment of enterprise-level performance which not only comprises completion of an evaluation form but is accompanied by supporting information on enterprise performance (e.g. audited financial accounts, certification and compliance to regulatory standards) as well as an on-site visit by a trained auditor.

The SCORE rating therefore facilitates firm-specific diagnosis detailing weaknesses identified at firm level and the kind of assistance required. The diagnosis ensures implementation of needs-based interventions and therefore helps facilitate the effective fund utilisation and focus of resources.

Second, it provides baseline data on SMMEs and facilitates the tracking of SMME capabilities and performance over time. Training programmes and other assistance to SMMEs can then be drawn in accordance with the needs of SMMEs as identified by the competitiveness rating.

Third, SCORE facilitates linkages and partnerships between government agencies and other institutions responsible for SMME development. While an agency responsible for SMME development may be responsible for coordination of services offered to SMMEs and monitor the performance of SMMEs and support programmes, the Malaysian SCORE has shown that inter-agency mechanisms and partnerships should be created to ensure that specific needs of SMMEs are addressed.

Finally, implementation of the Malaysian SCORE could be more appealing to CEDA and has the potential to address shortcomings identified in the CEDA support structure specifically in terms of needs-based firm solutions that capture an enterprises' uniqueness.

Notwithstanding the foregoing analysis of the SCORE approach to SMME competitiveness, success in implementation will depend on the following factors.

First, collaboration and partnership of institutions involved in SMME development is critical for effective implementation of SCORE. In Malaysia, strategic partners for the implementation of SCORE ranged from government departments, agencies responsible for entrepreneurship and SMME development and productivity improvements, infrastructure providers such as telecommunication authorities etc.

Second, a more coherent and coordinated approach to SMME development is critical for success. Third, investment in the training of auditors responsible for the rating of SMMEs as well in software development and maintenance should be considered.

Finally, certification and quality standards infrastructure (such as testing and certification laboratories) should be in place to support existing exporters and potential exporters.

Further, requirements such as audited financial statements may impose an additional financial burden on SMMEs. A balance might have to be struck in terms of innovative ways of enhancing the use of the competitiveness tool and reducing the regulatory burden on SMMEs.

Adoption and implementation of an SMME competitiveness rating of the type implemented by Malaysia would require several initiatives. One such initiative is the assessment of Botswana's institutional framework on SMME development to determine implementation capacity and institutional coordination mechanisms led by MITI.

The second initiative involves determination of the availability of firm auditing skills followed by relevant training (where capacity gaps exist) and investment in the company rating software.

Adoption of the Malaysian model for SMME competitiveness is likely to enhance growth and competitiveness of manufacturing sector SMMEs in Botswana. However, the discussion above suggests that it would require significant investment in implementation capacity in Botswana.

If Botswana government opts for contracting out Malaysian experts to design and implement the SMME competitive programme, this too would require considerable financial resources. Given the resource requirements, adopting the Malaysian SCORE model is likely to be implemented in the long term.

A South African institution, B&M Analysts runs a similar programme. B&M Analysts offers, amongst other services, competitiveness assessments; monitoring and evaluation of industry upgrading programmes; cluster strategy development, management and facilitation; and, training and mentoring across a wide range of manufacturing factors.

It is recommended that CEDA considers engaging the services of B&M Analysts or similar institutions to design and implement, in partnership with other institutions responsible for SMME development, an SMME competitiveness appraisal programmes.

8.3 Conclusions

With regard to the CEDA support structure, it is clear from the discussions above that CEDA does not have a support structure specifically tailored to the needs of the manufacturing sector. In terms of human capital, although the survey results indicate that most enterprises claimed to have technical skills, the application of technology by most enterprises is still low. Regarding financing, manufacturing firms still cite lack of finance as one of their key constraints.

They decry that funds provided to them are insufficient for business operations. It is therefore recommended that CEDA should consider the peculiarity of the manufacturing sector in its financing model.

Business advisory services offered by CEDA are undertaken during the project implementation stage and when problems are already emerging. It is advisable that advisory services should be provided before project implementation.

The discussion on the appraisal criteria for a competitive SMME indicates that there are various approaches to measuring SMME competitiveness. These include the development of a framework on guidelines and parameters for SMME supply-side capabilities and competitiveness; the SMME competitiveness grid developed by ITC and the SMME Competitiveness Rating for Enhancement (SCORE) developed by the government of Malaysia.

An analysis of the three approaches to measuring SMME competitiveness suggests that the Malaysian SCORE is the most appropriate SMME competitiveness appraisal tool. However, success in the implementation of the Malaysian SMME competitiveness model would require a coordinated and coherent approach to SMME development; significant investment in the firm rating software and requisite skills such as trained auditors, and certification and quality standards infrastructure.

As the Malaysian approach would require considerable implementation capacity and resources, it could be considered for implementation in the long-term. It is worth considering programmes on competitiveness assessments, monitoring and evaluation of industry upgrading, etc. of the type offered by B&M Analysts which are likely to require relatively less in terms of resource requirements than the Malaysian SCORE SMME competitiveness framework.

In the meantime, CEDA should consider engaging the services of B&M Analysts or similar institutions to design and implement an SMME competitiveness appraisal programme. Given the lack of expertise amongst CEDA staff, in addition to designing a suitable competitiveness appraisal programme, B&M Analysts should also devise a training programme to radically upskill CEDA staff on the full array of the dynamics driving manufacturing competitiveness and excellence.

This will ensure that appropriate interventions are put in place and hence reduce business discontinuation rates in the manufacturing sector. Interventions required to develop the manufacturing sector cannot be undertaken by CEDA alone.

There is need for close partnerships and collaboration with government departments and other parastatal organizations whose mandates can spearhead the development of the manufacturing sector.

CHAPTER 9

Partnerships and incentive policies for export oriented manufacturing SMMEs

Technical expertise of the production process is crucial to the development of the manufacturing sector. As indicated in Chapter 8, CEDA staff lack technical skills of the production processes involved in manufacturing and this hampers their ability to appraise manufacturing business proposals.

It is, therefore, important for CEDA to partner with institutions who possess such skills in order to capacitate its staff and/or use the skills from these institutions to appraise and mentor manufacturing enterprises. Moreover, CEDA should benchmark with similar organisations to learn on how they acquired technical skills and how those skills have been transferred to manufacturing sector SMMEs.

One of the Government's objective is to diversify the country's export base and one avenue through which this could be achieved is to promote export oriented manufacturing sector SMMEs. However, as indicated in Chapter 4, a very small proportion of SMMEs export their products. For this objective to be achieved an incentive structure should be put in place to support export-oriented SMMEs.

This chapter discusses and recommends partnerships that CEDA could forge with relevant and recognised bodies or institutions as well as benchmark on their technical expertise for the development of the manufacturing sector. The chapter also reviews incentive policies for export-oriented SMMEs and makes suggestions for their improvement.

9.1 Partnerships for CEDA to Benchmark against for Technical Expertise for the Development of the Manufacturing Sector

A sustainable and expanding manufacturing industry must reach essential quality standards and constantly upgrade technologies while at the same time improve cost efficiency. Quality standards and cost efficiency are particularly important for export oriented SMMEs if they are to be competitive in the global market place.

The importance of technical knowledge of the production process which a firm is involved in cannot be overemphasised. In several instances, SMMEs fail because of the inadequate knowledge of technical process of production. It is, therefore, important that additional to financial assistance, SMMEs in the manufacturing sector are capacitated with managerial capabilities, especially technical knowledge of the production process.

Findings of the enterprise survey suggest that technical expertise plays an important role in the manufacturing sector as a whole. This is evidenced by the higher proportion of managers and employees who indicated higher technical competence over other skills.

Of equal importance, the survey also revealed that these technical skills were acquired predominantly from tertiary education institutions (University or vocational institution). Although important, skills acquired through academic training may not be sufficient in practical applications, hence the need to further develop these set of skills.

One way these technical skills could be developed is through partnerships between CEDA and other institutions which have the requisite technical skills, especially in the manufacturing industry. Business owners/managers felt they had adequate technical skills needed to operate their businesses.

Conversely, key stakeholders indicated that manufacturing firms lack technical skills which leads to poor quality products. Moreover, there is limited use of technology in the sector and this leads to low output per firm, and limited and inconsistent supply.

CEDA has made effort to improve its capabilities on the technical expertise and financing of SMMEs. The Agency has initiated partnerships with local and international institutions. It undertook a benchmarking mission to India to learn how the country succeeded in promoting its manufacturing sector.

CEDA also visited Malaysia on a benchmarking exercise to learn from its counterpart, the Malaysia SMME Bank, on how it finances manufacturing businesses. The visit resulted in twinning partnership with the Malaysia SMME Bank through which there is staff exchange in both institutions.

CEDA has partnered with the University of Botswana (UB) Faculty of Engineering and the latter provides technical advice to manufacturing enterprises through the CEDA mentorship programme. Through this mentorship programme, CEDA offers technical and entrepreneurial assistance to manufacturing enterprises.

CEDA has discovered, however, that while the experts from the Faculty of Engineering have the technical skills, they do not have practical business skills to impart on the SMMEs and this renders the mentoring programme inadequate. CEDA should partner with the Botswana International University of Science and Technology (BUIST) as it appears to have programmes that infuse technology into business. These might prove useful in mentoring businesses that have adopted technology and hence enhance their business success.

The Botswana Human Resource Development Strategy has a goal to ensure that the skills and capacity base of the manufacturing sector is matched with sustained economic growth and development.

In line with this goal, CEDA should also develop partnerships with the tertiary and academic sector, the private sector and non-governmental institutions to introduce skills development and training programmes.

These will act as a catalyst for industry based skills development. SMMEs in the manufacturing sector could benefit from these programmes by using the opportunities available to skill current employees as well build a pool of skilled people from which to employ staff.

Locally, there is need to strengthen the relationship between LEA and CEDA. LEA's mandate is entrepreneurship and enterprise development in Botswana. It is our understanding that CEDA already has a Memorandum of Understanding (MoU) with LEA.

The relationship between CEDA and LEA should go beyond the MoU and develop into a close working relationship. LEA has an incubator training programme through which it trains prospective entrepreneurs on the practical technical aspects of their business operations.

A close relationship between LEA and CEDA would ensure that when incubates graduate they are in a better position to receive funding from CEDA. Moreover, this will ensure that LEA and CEDA have a common understanding of the priority sectors that need to be developed.

This will avoid a situation where LEA has incubators in sectors which CEDA does not consider priority and hence unlikely to fund, leaving the incubates with no funding, particularly for start-ups as commercial banks consider them to be high risk and will not offer them credit.

On technology development and commercialisation, CEDA should partner with BITRI and BIH. It is our understanding from the in-depth interviews that BITRI and CEDA have signed a MoU which will forge a close working relationship between the two institutions.

CEDA should consider partnering with and influencing the BITRI research programmes so that they concentrate in areas where there is potential for technology commercialisation. In addition, BIH could serve as a channel through which start-ups are nurtured in preparation for emerging technologies. These start-ups are likely to spearhead the digitalisation of SMMEs through the enhancement in productivity, connectivity and digital deliverability solutions. This approach has worked in countries like India.

To strengthen manufacturing firms technical expertise, Philippines has very strong local linkages especially stakeholders that are involved in the manufacturing sector. The Department of Trade and Consumer Affairs in MITI could partner the Pilipino counterpart, the Department of Trade and Industry, to learn from its experience.

The latter department has training and entrepreneurship development programmes that provide existing and potential entrepreneurs with necessary skills and knowledge to become competitive players in both the domestic and international markets.

In addition, the Department of Science and Technology in the Philippines is the main agency responsible for providing technology support.

Through its Small Enterprises Technology Upgrading Programme, it plans to help SMMEs in the following areas: technology needs assessment and technology sourcing; provision of seed funds for technology acquisition; technical training on hazard analysis and critical control points, good manufacturing practices, quality and environment management systems and other specific skills; technical and productivity consultancy services to participating firms; establishment of product standards; development of networks of accredited regional product-testing laboratories; establishment of a packaging R&D centre; and design and fabrication of cost-reducing equipment.

This is something that Botswana could benchmark in its attempt to grow the sector. It is recommended that government strengthens links between institutions responsible for innovation and those responsible for technology development in order to develop a technology upgrading programme for SMMEs.

In South Africa, the Small Enterprise Development Agency (SEDA) has a unit whose mandate is technology business incubation, and quality and standards. SEDA assists marginalised enterprises with all or most of the following: access to funds; access to markets; business skills; technical capacity and access to appropriate technology.

The Technology Transfer Unit's main objectives are to provide technology transfer services to small enterprises and provide specific technology support to women-owned enterprises. The Unit assists in technology commercialisation and harnesses the entrepreneurship drive of the technology community in South Africa.

It also helps investors and new enterprises to use technology optimally in improving competitiveness of their products and services. Further, the Unit facilitates access to business infrastructure, strategic guidance, financial and legal advice, and creates an environment of learning and sharing in which information, experience and ideas are exchanged freely.

9.2 Institutional Value Chain in the Manufacturing Sector

Using lessons from other countries (Philippines, Malaysia and South Africa), for the manufacturing sector to receive appropriate support it is important to understand all the institutions involved in supporting it, that is the ecosystem within which manufacturing enterprises operate. This is usually done through an institutional value chain map which is presented in Figure 9.1. As shown in the figure, all the support institutions in the manufacturing sector, right from business initiation to marketing, are crucial. Thus, support to the manufacturing sector cannot be undertaken by CEDA alone, all the institutions in the value chain have a role to play for the successful development of the manufacturing sector.

Business Initiation

At business initiation stage, the key institution is LEA whose main mandate is to instil entrepreneurial spirit among citizens. This stage is quite important because for one to set up a business they must initiate it and this normally starts with an idea. LEA assists prospective entrepreneurs in putting their ideas into a viable business plan.

However, some entrepreneurs do not receive any assistance from LEA, but get business planning services from the market. Another important support from LEA is provision of incubation services, whereby prospective entrepreneurs are given the opportunity to learn by doing in whatever business they want to venture into.

Incubation is quite important because the incubatee learns all the processes involved in running of a businesses such as technical, managerial and financial skills. At the end of the incubation period, it is expected that the incubatee will have mastered the operations and ready for real world business.

Other institutions that support the business initiation stage are the Companies and Intellectual Property Authority (CIPA) for company registration. This is done even before the business starts operation. Other requirements include environmental legislation which is the responsibility of the Department of Environmental Affairs (DEA), business licensing which is the responsibility of the Department of Industrial Affairs (DIA) etc.

Introduction of the online business registration system at CIPA has reduced the length of time it takes to register a business from 14 days to one day. Despite these developments, SMMEs experience delays in most institutions that are responsible for the enterprise development stage.

As detailed from the FGDs, it is evident that business licensing in Botswana is a bureaucratic process with fragmented players. There are too many regulations and each player has its own requirements. Improvements achieved with business registration should be extended to the licensing aspect of starting a business.

Financing

Once the business idea has been initiated and/or developed further into a business plan, it needs to be funded. Financial support is required by all prospective businesses regardless of whether they have gone through incubation or not.

There are numerous financing sources as indicated in Chapter 4, which include financial DFIs (CEDA, BDC, NDB); commercial banks; government support programmes; (Women Economic Empowerment Programme (WEEP) and Youth Development Fund (YDF)), self-financing and others. In terms of institutional support, there appears to be a discrepancy between the institutions involved in business initiation and those responsible for financing.

For example, a prospective entrepreneur who underwent LEA training, assisted to develop a business plan, and was an incubatee is not guaranteed CEDA assistance. It is, therefore, recommended that there should be close collaboration between LEA and CEDA in the appraisal of business plans.

This can only be possible if the two institutions work closely and use the same parameters and criteria to determine viability of prospective businesses. This is likely to reduce business proposal failure rate. The collaborative relationship would enable the two organizations to share notes and leverage each other's strategic priorities.

The capacity to appraise business proposals and monitor project implementation that have been financed varies across government agencies. For example, CEDA has dedicated officers and if need be, can draw from external expertise (mentors) to appraise manufacturing sector SMME projects and monitor their implementation.

Based on in-depth interviews, SMME project appraisal and monitoring capacity may be inadequate in other government funding agencies. Interviewees proposed that due to insufficient appraisal and monitoring capacity, SMME project finance for different schemes should be coordinated and implemented by CEDA.

Knowledge and technical skills of business are important during appraisal stages of business proposals because lack of such knowledge can lead to erroneous decisions regarding viability of such a business.

Capacity Development

Once a business has been funded and is in operation, the next priority is to develop its technical and innovative capacity. The following institutions; NFTRC, BIH, BITRI, BIUST and others can be instrumental in this regard because their mandates are innovation and technology development inclined.

One of the critical challenges in technology development is that assistance provided by institutions such as BIH and BITRI do not bear the expected results as their solutions do not always translate into commercial prototypes. In many instances, prospective innovators end up with prototypes as they do not receive adequate assistance to commercialise and eventually manufacture the products.

The advent of the fourth revolution calls for all countries to be at the forefront of technological development and innovation if they are to be successful, particularly in the manufacturing sector. Therefore, Botswana should reconsider its model of technology development so that prototypes go to the final stage of commercialisation.

Several agencies are responsible for various capacity building initiatives. It emerged during stakeholder interviews that one of the major challenges is lack of coordination between capacity building initiatives.

For example, business advisory and mentorship institutions; LEA, CEDA and BITC seem to be working in opposing directions, at times resulting in duplication of efforts. The lack of coordinated efforts, was according to stakeholders, a serious constraint on product quality upgrading and certification programmes.

As an institution charged with the responsibility of generating food technologies, NFTRC is not yet certified/accredited as a laboratory that can certify food products for exports. As a result, export firms are compelled to access the service in South Africa.

Stakeholders recommended, among other initiatives, a comprehensive review of the institutional framework and standards setting infrastructure to enhance coordination.

The business growth and expansions stage mainly focused on creating an enabling environment for post-entry growth of SMMEs, graduation of enterprises from one level to another (e.g. from small to medium) and enhancing both local and international market access opportunities for SMMEs.

More concerted effort still needs to be done by institutions involved in business growth and expansions, particularly in linking producers to end markets. The Special Economic Zones is a recent initiative, therefore, it is too early to assess its contribution to industrial development.

UNCTAD (2005) indicates that finance, human resources and technology are essential elements in the establishment of industrial zones and success requires an effective coordination mechanism among different agencies.

A 2014 report by ERIA and OECD also identifies good coordination among and within government agencies as one of the essential dimensions for a good institutional framework for SMME development.

Based on literature, institutional coordination seems to be an integral component of SMME development. Strengthening institutional coordination and alignment of SMME programmes of different government agencies and private entities is a major determinant of success in business development programmes for manufacturing sector SMMEs in Botswana.

Figure 9.1: Institutional Value Chain Map

Market Access

One of the key challenges facing SMMEs mentioned in Chapter 5 is market access, both locally and internationally. There are various institutions and interventions that have been mandated to assist SMMEs to access markets locally such as PPADB, MITI through EDD and other preferences under public procurement.

BOBS can also assist companies access markets by certifying products using their standards. However, certification of standards and their maintenance is an expensive exercise and companies should see its benefits if they are to do it. Companies like BITC also assist in finding markets for export oriented SMMEs through trade shows.

However, it appears that the capacity of SMMEs to export is very low owing to low quality products, inconsistent and limited supply. Most manufacturing sector SMMEs rely on government procurement and they never grow into big businesses because the local market is limited.

Policy and Regulatory Environment

The policy and regulatory environment within which manufacturing sector SMMEs operate are crucial. Institutions with regulations governing the manufacturing sector include; BURS for taxation, Department of Environmental Affairs for Environment Impact Assessment; Ministry of Health and Wellness for safety, and CIPA for company registration.

Development of the manufacturing sector requires that all actors at each stage of the value chain work effectively and efficiently if the manufacturing sector is to be sustained. There must be clear linkages between the actors at each stage of the value chain as well as between the stages.

What is critical and lacking currently is coordination of the activities of all the institutions and each one performs its role independently of other institutions.

9.3 National SMME Coordinating Council

Review of the policy and regulatory environment indicates that there are numerous policies, laws and regulations that have been developed for the promotion of the SMME sector in general and manufacturing sector SMMEs in particular.

Section 9.2 reviewed the institutional value chain of organizations involved in the support of the manufacturing sector. The review indicates that the institutional support for manufacturing sector and manufacturing sector SMMEs includes business initiation, financing, capacity development and support on market access. The review also indicates that several agencies are involved at each stage of the institutional value-chain map. It is evident from the discussions above that the development of SMMEs in general and manufacturing sector SMMEs in particular is not a result of a single policy and/or agency, but that success depends on the interaction of several policies, strategies and actors.

ERIA (2018) argues that effectiveness of SMME policy is determined by coordination, sequencing and targeting of interventions. A review of the institutional framework in selected Asian countries by ERIA and OECD (2014) corroborate the assertion made above.

The report indicates that Malaysia has established a specialised agency - SMME Corp to coordinate policy interventions that are implemented by different ministries and government agencies for the development of SMMEs. The agency also provides secretarial services to the National SMME Council which is chaired by the Prime Minister.

According to the report, the Singapore Standards, Productivity and Innovation Board (SPRING), renamed International Enterprise Singapore in 2018 (OECD and ERIA, 2018), in partnership with other agencies, offers financial, capability and management development, technology and innovation, and market access support to enterprises.

International Enterprise Singapore is autonomous but accounts to the Ministry of Trade and Industry through a contract that contains key performance indicators. The OECD and ERIA (2018) report highlights that the Office for SMME Promotion (OSMEP) is charged with the responsibility of coordinating SMME policy interventions of various government agencies, management of the budget for SMME development and monitoring the implementation of the SMME Promotion Plan.

As is the case in Malaysia, OSMEP reports to a board, National Board of SMEs Promotion and the board is chaired by the Prime Minister.

The following observations are drawn from the discussion on SMME agencies in these selected Asian countries. The first observation is that the SMME interventions are coordinated by a single agency.

A single coordinating agency for SMME development is likely to ensure success in the implementation of SMME interventions among and within government agencies. Second, SMME coordinating agencies report to a board which, in the two or the three cases reviewed, reports to the highest office, that of the Prime Minister.

Reporting to the highest office in the country is likely to improve accountability of all agencies responsible for SMME development and have a positive impact on the SMME sector. While the SMME development agency in Singapore is slightly different from the others, accountability is ensured by a performance contract.

Finally, SMME agencies reviewed have a sizable staff complement, which according to OECD and ERIA (2018), range from 200 to 300 staff members. Adequate human and financial resources accompanied by adequately designed programmes that are also implemented effectively is likely to have a positive effect of SMME development.

Botswana could draw lessons from these Asian countries which have put SMME development at the centre of their development agenda through a coordinated approach. It is therefore recommended that:

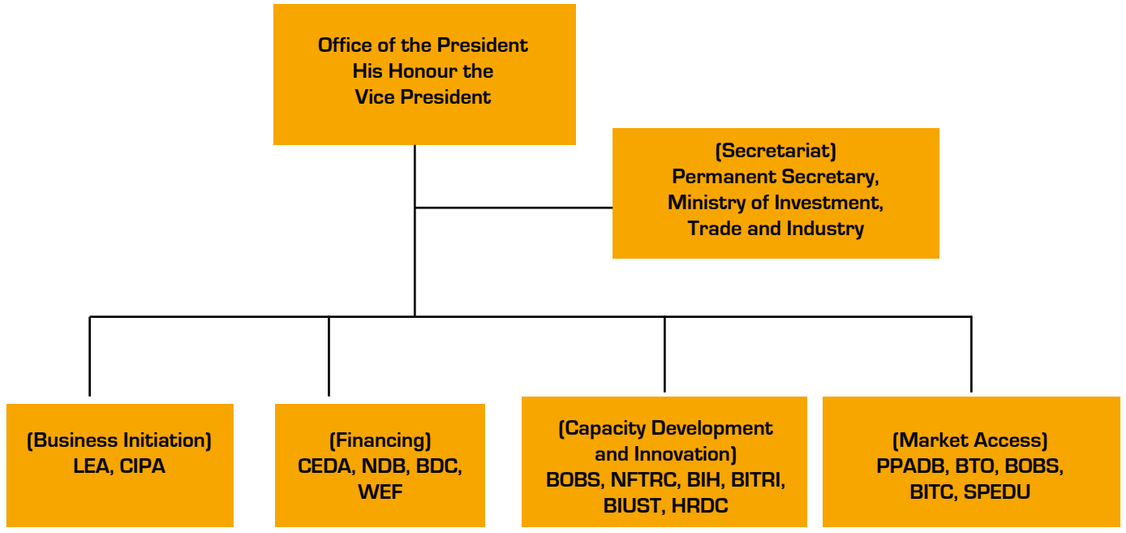
i. Botswana establishes a National Council for SMME development whose task is to coordinate SMME policy-related interventions;

ii. The SMME Council should be chaired by His Honour the Vice President with clearly defined performance indicators to track performance; and

iii. The Ministry of Investment, Trade and Industry should provide secretariat services to the Council and should be provided with adequate human (highly skilled staff on SMME development) and financial resources for effective implementation of SMME development programmes and plans.

The structure and the membership of the council are presented in Figure 9.2. As indicated in the figure the Office of the President, His Honour the Vice President will chair the Council. The Ministry of Investment, Trade and Industry will be provide the secretariat and will act as a coordinating agency. Other players will be members and represented at the highest level of the Chief Executive Officer.

Figure 9.2: National SMME Coordinating Council



9.4 CEDA Incentive Policy for Export Oriented Manufacturing SMMEs

Before we discuss the CEDA incentive policy for export-oriented manufacturing firms, let's first discuss tax incentives provided by Botswana government through different implementing institutions. Governments give incentives to promote particular subsectors or geographic locations.

The incentives could be in the form of financial incentives as well as any other form. Financial incentives include grants, subsidised credit and insurance at preferential rates; fiscal incentives include tax holidays, tax reductions or exemptions on profits, capital, labour, sales, value added, imports and exports; while other incentives include subsidised infrastructure, utilities, markets preferences, regulatory incentives linked to ownership and other preferential treatment (UNCTAD, 2005). Many government regimes will combine elements of all three categories.

In Botswana, the government has introduced tax incentives to motivate manufacturing firms. These include the corporate income tax, tax charged on imported machinery and training tax benefits to encourage manufacturing firms to train their employees.

The Manufacturing Approval Order of the Incomes Tax Act has a clear definition of what the manufacturing sector entails. It emphasises new and distinctive characteristics of a manufactured product from a raw material. Accordingly, the following activities will not be considered as manufacturing in the Manufacturing Approval Order:

Packaging and bottling, diluting, mixing and blending, printing, marking and labelling, washing, painting, dyeing, simple assembly functions, baking, removal of dust, sorting, to name just a few. Before a firm can be considered for any tax incentives, it has to apply by filling in an application form to be assessed by the Tax Review Sub-Committee.

Only after meeting the requirements would firms be approved and granted 15 percent corporate tax relative to the standing 22 percent corporate income tax. Generally, according to stakeholders, the assessments are conducted to help firms grow whilst still paying tax.

Furthermore, in Botswana, payment of Value-Added Tax (VAT) is based on a firm's annual turnover not sector. Firms that have a turnover exceeding P1 million are required to register to pay VAT. If the turnover lies between P500 000 and P1 million, the firms can elect to register for VAT while those with turnover below P500 000 are exempted from registering.

Additionally, exporting firms are exempted from paying VAT. This makes their goods and services cheaper and hence promote growth of SMMEs. Manufacturing firms are also eligible for the exemption of sales tax on imported raw materials provided the produce is for export outside SACU.

Furthermore, all machinery and equipment imported for purposes of manufacturing is duty free. Finally, to encourage firms to train their employees, firms are reimbursed the training costs based on the total levy paid at a particular point in time.

There are other tax incentives provided by institutions such as Special Economic Zones Authority (SEZA) and SPEDU, in an effort to induce manufacturing growth in the country. This calls for a coordinated effort in dealing with the incentive structure amongst the various implementing organisations concerned. If the incentive structure is fragmented, then undeserving firms may benefit from these tax incentives at the expense of deserving and competitive firms.

We now review the CEDA incentive policy for export-oriented manufacturing sector SMMEs. According to the CEDA Credit Policy (CCP), businesses are not differentiated by sector. As a result, CEDA does not have an incentive policy for manufacturing sector SMMEs including those that are export-oriented.

An incentive policy requires that CEDA treats manufacturing enterprises differently. The policy objective will be to increase loans offered to the sector and thereby increase the sector's contribution to value added as well as employment.

It is worth noting that CEDA does not provide separate incentives for export oriented SMMEs in any sector, including manufacturing. As a result, the majority of SMMEs market their products locally, with only 10 percent of the sampled respondents in the enterprise survey indicating that they exported their products. Most SMMEs in the manufacturing sector produce for the local market.

In deciding on incentives that CEDA should provide to export oriented SMMEs, it is useful to consider constraints faced by export firms. The constraints were discussed in detail in Chapter 4 and include poor quality products and failure to meet technical regulations.

Recently, CEDA introduced pre-project financing which includes an aspect of product certification. To the extent that entrepreneurs are willing to export and use this fund for product quality improvements, it is likely to promote exports.

To address the other constraint of failure to meet technical regulations of importing countries, CEDA should consider training prospective exporting firms on the requirements of potential export destinations. The Agency should collaborate on this matter with BITC as it has the mandate to promote Botswana's exports.

There should be concerted efforts to train manufacturing sector firms to operate in export markets. This training should be offered to specific sectors which have potential to export and are regarded as priority sectors by government.

Botswana, and BITC in particular, can learn valuable lessons from the Malaysia External Trade Development Corporation (MATRADE), a national trade promotion agency. Its sole responsibility is export promotion of Malaysian products and quality and excellence are at the heart of MATRADE's export promotion strategy so that their Made-in-Malaysia payoff line is synonymous with excellence, reliability and trustworthiness.

Before Malaysian companies could export, they are required to meet demands of the local market which are in most cases above the international market requirements. Besides trade exhibition and shows, MATRADE conducts market research to gather market intelligence for prospective Malaysian companies.

This ensures that Malaysian companies have full knowledge of markets they wish to export to. MATRADE has an assessment tool to determine whether a Malaysian company is export ready before it could be allowed to export. One of the roles of MATRADE is to assist Malaysian companies establish their presence overseas and raise their profiles in foreign markets through different promotional drives including participation in trade missions, export acceleration missions and trade fairs.

Another constraint bedevilling local SMME export readiness is low productive capacity. Most firms produce small quantities of products which end up in the local market. This might be due to inconsistency of supply due to several factors such as constraints in accessing raw materials as well as the level of technology used as indicated in the survey results.

In order to increase capacity of existing firms and attract new export oriented firms, CEDA should consider introducing specific incentives for these firms. These could include lower interest rates and longer grace and repayment periods. This will attract new export-oriented firms and an expansion of existing firms and, as a result, increase in their capacity and exports. Preferential treatment for export oriented manufacturing firms will enhance production of manufactured products for the export market.

Another constraint related to capacity of local firms, especially at project conception stage, is that most are inward looking and tend to rely on government procurement. At the initial stage of project conception, firms think only of the local market, especially government because of preferential procurement schemes.

This limits the firms' potential in terms of long-term growth as it targets only the local market which is small in size. At the appraisal stage of the project, CEDA should consider giving some weight to firms which have plans to export their products. Additionally, a certain amount of loanable funds should be reserved for the export- oriented manufacturing firms.

However, incentives given by CEDA alone may not be enough to spur the development of the export-oriented manufacturing sector. Government policies can be crafted in such a way that they promote the growth of the export-oriented manufacturing sector. These may be in the form of export subsidies and tax holidays. These export subsidies should be consistent with the multilateral trading obligations that Botswana has entered into as a member of the World Trade Organisation. Tax holidays were applied during the implementation of the (FAP) with some success in the textile industry.

Another important lesson is from Kenya, where the Export Processing Zones Authority (EPZA) has been mandated to promote and facilitate export-oriented investments and provide an enabling environment for such investments. The authority offers a range of attractive fiscal, physical and procedural incentives to ensure low cost operation, fast set up and smooth operations for export-oriented businesses. These incentives include among others: Incentives for tax and investments; 10 years' corporate tax holidays and 25 percent tax holiday thereafter; 10-year withholding tax holiday on remittances to non-residents; 100 percent reductions on new investments in the EPZ on buildings and machinery, applicable over two years; and a perpetual exemption from VAT and customs import duty on inputs – raw materials, machinery, office equipment, certain petroleum fuel for boilers and generators and other supplies.

In addition to the above incentives, the EPZA has an SMME Development Programme which aims at mentoring SMME exporters with majority local Kenyan shareholding desiring to set up under export processing zones (EPZ). Some of the target sectors are: horticulture/food processing; textile/ apparel; leather; and commercial crafts. Incentives under this programme include: EPZ tax incentives similar to large EPZ enterprises; purpose built infrastructure with small go-downs; reduced rent rate and service charge and capacity building (Business Development Services provided to SMEs – in various areas such as strategic business planning, quality financial management, human resource management). There is a set of criteria that is used to select the SMMEs and these include; no start-ups, but new version of existing business; a set maximum initial investment and local shareholding of 75 percent.

With so few SMMEs exporting their products, it is not feasible to set up a Kenyan type EPZ. However, there is need to provide similar services if the country is to promote export-oriented SMMEs. The needs of SMMEs differ from those of larger enterprises and hence there is a need to establish a special programme for them as in Kenya. The services of an export promotion zone could be divided among the existing institutions, SEZA and BITC. These organisations should promote investment and local production to feed both the local and export markets – with exporters being given additional incentives. There is therefore a need for close collaboration between the two institutions to avoid duplication of efforts and opposing interventions.

9.5 Conclusions

Partnerships with local and international institutions with manufacturing technical expertise is essential for the development and expansion of a sustainable manufacturing industry. CEDA has established some partnerships with local institutions such as LEA, the University of Botswana (Faculty of Engineering) and BITRI using MOUs as the mode of partnership. While these partnerships have been beneficial in terms of enhancing technical and entrepreneurship aspects of the manufacturing businesses, CEDA needs to strengthen these partnerships beyond MOUs, to a closer working relationship to enhance outcomes. There is also need for CEDA to forge links with other local institutions such as BIUST and other local tertiary education institutions including vocational training institutions. CEDA has also partnered with international institutions, including a twinning partnership with the Malaysia SMME Bank and benchmarking exercise to India to draw lessons on manufacturing sector development.

With regard to institutional support for the manufacturing sector, this chapter has established that government departments and other agencies offer institutional support to the manufacturing sector at the business initiation, financing, capacity development and market access stages of business development. Concerns with the institutional value chain that supports the manufacturing sector include delays in business licensing, fragmented efforts by institutions involved leading to inefficiencies and too many regulations. The discussion on the incentive policy for export-oriented manufacturing sector revealed that CEDA does not have an incentive policy for the manufacturing sector including export-oriented manufacturing enterprises.

Proposals for export-oriented manufacturing sector incentives that CEDA should consider include, financing of certification of products (including maintenance of quality certificates), needs-based training of prospective exporting firms on technical regulations for importing countries and preferential treatment for export-oriented firms at project appraisal stage. At the national level, incentives should include tax holidays and other incentives. The experience of Kenya on EPZ and MATRADE in Malaysia provide valuable lessons of services offered to export-oriented SMMEs which Botswana could draw from.

CHAPTER 10
Conclusions and recommendations

This chapter presents the main conclusions of the study and suggested recommendations for the improvement of the manufacturing sector. The conclusions are derived from chapters 3 to 9, while the recommendations are divided into those that could be implemented by CEDA alone and those that should be implemented by other institutions, including government departments and parastatal organizations.

10.1 Conclusions

10.1.1 Policy and Regulatory Environment

The policy and regulatory environment within which the manufacturing sector SMMEs operate is supportive of their growth. The challenge lies in the fact that Botswana's manufacturing sector is still in its infancy and thus firms are highly reliant on government financing for their survival.

The limited productive capacity of these firms hinder them from taking advantage of the conducive policy environment in the country. The other challenge is the delayed implementation of some initiatives such as the SDP. This, coupled with fragmented incentive structure provided by various implementing agencies such as SEZA and SPEDU, works against the sound policies that the country has formulated. Implementing agencies such as MITI, MFED as well as PPADB need to agree on a working definition of the manufacturing sector and the extent to which public procurement can be used to drive industrialisation of the country.

Contradictory interpretations by the organisations in question undermine the positive effect that the policy environment can have on the competitiveness of manufacturing sector SMMEs in the country.

10.1.2 The Current State of the Manufacturing Sector in Botswana

The results of the enterprise survey indicate that most (64.5 percent) manufacturing SMMEs are male owned and the majority (59.4 percent) of owners/managers have tertiary education.

An overwhelming majority of enterprises had registered their businesses, particularly with CIPA. In terms of membership to business associations, only 23.1 percent indicated that they were members of such associations, suggesting their enterprises do not see the benefits of being members of associations.

On average, each enterprise employed about 20 people in 2017 and 2018. When asked about their financial performance, 51 percent of the interviewed businesses indicated that it had improved, while 24 percent and 25 percent indicated that it had stagnated and declined respectively. The major source of funding for start-ups is self-financing, followed by financial institutions.

Of those who sourced their funds for start-ups from financial institutions, the majority indicated that they got finance from commercial banks, followed by YDF and CEDA. This is despite the fact that CEDA was created mainly to finance start-up businesses.

The reason for this might be that as indicated in Chapter 4, many business owners feel that the lending requirements at CEDA are cumbersome. In addition, business owners who reported that they used commercial banks to finance their start-up might in fact have obtained personal loans and used them to finance their business as these are easy to obtain especially if someone is employed.

The buyer-driven nature of retail supermarkets and their quality requirements tend to be a significant impediment to market access for Botswana's manufacturing SMMEs. Initiatives to address these constraints include technical and financial support for manufacturing sector SMMEs to enable their participation in retail markets.

The Woolworths retailer-led programme is a good example of how retailers can facilitate market access for SMMEs and should be replicated to cover other retailers and product coverage be increased.

Poor quality products have exacerbated market access constraints faced by SMMEs. Government should consider the introduction of a quality support programme for SMMEs, address the shortage of testing and certification laboratories and related capacity constraints.

The potential of government procurement as a tool to promote industrial development in general and manufacturing SMME growth in particular is undermined by inconsistencies in the implementation of the EDD initiative and definitions of the manufacturing sector. The other constraints include: the lack of regard for quality and product certification in public procurement, and cumbersome documentation requirements for SMMEs. These need to be addressed to improve the effectiveness of government procurement as an industrial development tool.

10.1.3 Key Constraints to Development of a Robust and Competitive SMME Led Manufacturing

Numerous factors have been found to hinder the development and competitiveness of manufacturing sector SMMEs in Botswana. These include among others, lack of access to finance, markets and raw materials, as well as limited manufacturing production related skills and support services.

Discrepancies in business regulations and quality certifications as well as inadequacies in ICT infrastructure have also been seen to have an impact on SMME development. As a result, there is need for a coordinated effort between industry, government departments and private sector associations to provide support for the sector.

On the other hand, inefficiencies in the national technical infrastructure may result in delays in pre-shipment inspections, certificates of origin, delays in conformity assessments and inefficiencies in quality control measures coupled with SMMEs' limited ability to adhere to quality standards and this will hinder market access.

We recommend that the government of Botswana together with BOBS, MITI and CEDA should work together to improve efficiency of the national technical infrastructure.

10.1.4 Key Priority Sectors in Manufacturing

Ten manufacturing subsectors have been selected as priority subsectors. These are: beef; leather, grain and horticulture (agro-processing); diamond; textile and apparels; automotive parts; plastics as well as chemicals and pharmaceuticals.

These subsectors were selected from key regional and national policy and strategy documents. Apart from beef, leather and jewellery, all the other subsectors depend on imported raw materials as there is limited or no supply from local suppliers. This in itself can create problems especially if regional value chains are not well developed.

10.1.5 Value Chain Mapping and Analysis of Priority Sectors

The identified value chains have been categorised into local and regional value chains. The former involves the whole production process from the raw materials to the finished products while the regional value chains which are characterised by the production of raw materials locally to be used for the processing of final products in other countries, particularly South Africa or raw materials being sold to regional value chains.

Under local value chains, there are numerous opportunities for the manufacturing sector SMMEs depending on selected value chains. The beef and jewellery value chains were the only two sectors which were found to have a positive trade balance.

However, opportunities exist to increase exports of manufactured products because of the abundance of raw materials. The raw materials can also be increased by unlocking bottlenecks in the value chain to stimulate primary production.

For the other value chains, imports far exceed exports implying that there is enough market locally to absorb products from these value chains. This presents an opportunity for manufacturing sector SMMEs to increase their production to meet local demand and eventually export markets.

10.1.6 CEDA Support Structure for the Manufacturing Sector and Criteria for Competitive SMMEs

With regard to the CEDA support structure, it is clear that CEDA does not have a support structure specifically tailored for the needs of the manufacturing sector.

In terms of human capital, although the survey results indicate that most enterprises claimed to have technical skills, the application of technology by most enterprises is still low.

When it comes to financing, manufacturing firms still cite lack of finance as one of their key constraints. They decry insufficiency of funds provided to them for business expansion. It is, therefore, recommended that in its financing CEDA should look at the peculiarity of the manufacturing sector. In addition, CEDA should separate manufacturing from services to better serve the needs of the manufacturing sector and set aside some funds specifically for the sector. Further, CEDA does not have an incentive policy for the manufacturing sector. Therefore, there is a need to introduce incentives such as low interest rates, longer grace and repayment periods.

Business advisory services offered by CEDA are normally undertaken during project implementation stage when problems are already emerging. It is advisable that advisory services should be carried out before project inception. Government should also consider using the Competitiveness Rating Enhancement (SCORE) similar to the one used by Malaysia in assessing its funded projects.

This will ensure that appropriate interventions are put in place and hence reduce business discontinuation rates in the manufacturing sector.

Interventions required to propel the manufacturing sector forward cannot be undertaken by CEDA alone. There is need for close partnership and collaboration with government departments and other parastatal organizations whose mandates can spearhead development of the sector.

The discussion on the criteria for a competitive SMME indicates that there are various approaches to measuring the competitiveness of SMMEs. These include the development of a framework on guidelines and parameters for SMME supply side capabilities and competitiveness; the SMME competitiveness grid developed by ITC and the SMME Competitiveness Rating for Enhancement (SCORE) developed by the government of Malaysia.

An analysis of the three approaches to measuring SMME' competitiveness suggests that the Malaysian SMME competitiveness framework (SCORE) is the most appropriate SMME competitiveness appraisal tool that CEDA could adopt with some modifications. However, success in the implementation of the Malaysian SMME competitiveness model would depend on a coordinated and coherent approach to SMME development; significant investment in the firm rating software and requisite skills such as trained auditors, and certification and quality standards infrastructure.

As the Malaysian approach would require considerable implementation capacity, it is worth considering programmes on competitiveness assessments, monitoring and evaluation of industry upgrading, etc. of the type offered by B&M Analysts which are likely to require relatively less in terms of resource requirements than the Malaysian SCORE SMME competitiveness framework.

10.1.7 Partnerships for CEDA to Benchmark against Technical Expertise for the Development of the Manufacturing Sector

Partnerships with local and international institutions with manufacturing technical expertise is essential in the development and expansion of a sustainable manufacturing industry. CEDA has established some partnerships with local institutions such as LEA, the University of Botswana (Faculty of Engineering) and BITRI using MOUs as the mode of partnership.

While these partnerships have been beneficial in enhancing technical and entrepreneurship aspects of manufacturing businesses, CEDA needs to strengthen these partnerships beyond MOUs, to a closer working relationship to enhance outcomes.

There is also need for CEDA to forge links with other local institutions such as BIUST and other local tertiary education institutions including vocational training institutions. CEDA has also partnered with international institutions, including a twinning partnership with Malaysia SMME Bank and benchmarking exercise to India to draw lessons on manufacturing sector development.

With regard to institutional support to the manufacturing sector, government departments and other agencies offer institutional support to the manufacturing sector at the business initiation, financing, capacity development and market access stages of business development.

Concerns with the institutional value chain that supports the manufacturing sector include delays in business licensing, fragmented efforts by institutions involved leading to inefficiencies and too many regulations.

The discussion on the incentive policy for export-oriented manufacturing sector revealed that CEDA does not have an incentive policy for the manufacturing sector including export-oriented manufacturing enterprises.

Proposals for export-oriented manufacturing sector incentives that CEDA should consider include, financing the certification of products (including maintenance of quality certificates), needs-based training of prospective exporting firms on technical regulations for importing countries and preferential treatment for export-oriented firms at project appraisal stage.

At the national level, incentives should include tax holidays and other incentives. The experience of Kenya on EPZ provides valuable lessons on services offered to export-oriented SMMEs which Botswana could draw from.

10.2 Recommendations

The following recommendations are suggested for the improvement of the manufacturing sector.

10.2.1 Government and Other Stakeholders

Policy, Regulatory Environment and Market Access

Firms, in particular exporting firms and those participating in global value chains bear costs associated with meeting requirements for product quality standards and certification as well as costs of procedural obstacles (paperwork and waiting periods) associated with the implementation of standards.

Recommendation

1. BITC should undertake an assessment of market access and other constraints faced by export-oriented manufacturing SMMEs with a view to determining possible areas for intervention and reform.

Constraints such as inadequate capability and capacity of SMMEs to produce quality goods, inappropriate technical skills and insufficient financial and management skills and brand loyalty for well-established foreign brands further compound market access constraints for manufacturing SMMEs in Botswana.

Recommendation

2. BITC should strengthen the Brand Botswana campaigns, through initiatives such as mind-set change programmes that support locally produced goods. These campaigns should be accompanied by a robust product quality and standards programme for SMMEs.

Initiatives such as introduction of retailer-led supplier development programmes and strengthening linkages between SMMEs and large-scale enterprises are some of the possible options of enhancing market access opportunities for SMMEs.

Recommendation

3. Government should introduce retailer-led supplier development programmes, and to ensure compliance, the licensing conditions of retailers should stipulate a minimum proportion of manufactured goods that should be sourced from locally-based manufacturing SMMEs. Capacity to enforce and monitor such provisions should also be developed to facilitate adherence with requirements.

Export consortia, production cooperatives, and, quality consortia are some of the market access networks that producers in some countries have used to enhance their market access opportunities. Production cooperatives have been found to be one of the most suitable market access networks for microenterprises and handicrafts because of their focus on upgrading members' production and marketing capacities.

Recommendation

4. Government should promote the establishment of production cooperatives for manufacturing microenterprises and handicrafts as one of the initiatives to upgrade production and marketing capabilities of SMMEs.

The PPAD Act contains provisions for socio-economic development and these provisions have been used to introduce initiatives aimed at meeting certain socio-economic objectives. The Act is flexible enough to accommodate any socio-economic activities that the government may want to promote at any given time. For instance, procurement schemes have been used to empower specific categories, such as women, youth and people with disabilities. In the same context, the Act could be used to promote the development of SMME manufacturing sector.

Recommendations

5. Public procurement agencies should develop regulations in line with socio-economic provisions of the PPAD Act. These are aimed at promoting local manufacturing SMMEs through, among other interventions, reservation/set-asides (designation of a certain portion of the public procurement budget) and preference schemes targeted at locally manufactured products by SMMEs backed by strong monitoring and enforcement, and, stringent requirements for granting waiver requests.

6. Through the socio-economic provisions of the PPAD Act, government should enhance the participation of local manufacturing SMMEs by introducing price preferences for large tenderers/companies that sub-contract a set proportion or form consortiums with SMMEs.

It emerged during interviews, that Invitations to Tender (ITTs) are normally floated for a very short time. This creates a bias against locally based manufacturing SMMEs since this leaves them with very little time to adjust their production processes, secure raw materials and other inputs, and respond to the tender.

Recommendation

7. Procuring entities, should set longer time period for submission of tenders on the supply of manufactured products. Theses entities should develop and publish their multi-year procurement plans to enable local manufacturing SMMEs to effectively participate in the public procurement market.

Poor quality of manufactured products is one of the major constraints to access the public procurement market. Since product quality certificates are not a major consideration for government standards, manufacturing SMMEs that rely on government procurement have no incentive to certify their products, and this exacerbates the poor product quality constraints.

Recommendation

8. It should be made a legal requirement that procurement entities should, at the time of advertising procurement opportunities, reference quality standards and include incentives (e.g. preferential treatment) on product quality standards as part of the evaluation criteria.

One of the strategies that the Government uses to promote the manufacturing sector is the tendering process. However, most SMMEs do not respond to ITTs largely due to complexity, costly and burdensome compliance requirements associated with public procurement.

Recommendation

9. ITT requirements, while upholding established standards, should be simplified to enable the participation of SMMEs in government tenders.

The implementation of the EDD strategy has not achieved its intended outcomes of developing globally competitive SMMEs, in part, due to the absence of the database on locally produced goods which procuring entities could draw from when developing their procurement plans.

Recommendation

10. The use of administrative data should be strengthened to ensure that data is collected and a database of locally-based manufacturers is developed.

There are inconsistencies in the definition of manufacturing between MFED and MITI with regard to targeted incentives, where MFED emphasises substantial transformation of a product, while MITI includes simple packaging.

Recommendation

11. Government and parastatals should adopt a standard definition of what constitutes manufacturing with regard to targeted incentives.

Quality standards are imperative in ensuring manufacturing firms' competitiveness and profitability both in local and international markets. Botswana Bureau of Standards (BOBS) is tasked with the role of promotion and maintenance of standardisation and quality assurance. Given the importance of quality assurance in any business, low levels of certification remain a cause for concern.

Recommendation

12. BOBS should introduce product quality support programmes with embedded graduation criteria for SMMEs in order to improve their market access, both locally and internationally. The product quality support programmes should include a subsidy on product standards and certification for SMMEs.

There are several institutions involved in the governance of the manufacturing sector. There are concerns that the institutional value chain that supports the manufacturing sector, is fragmented, over regulated and inefficient. Further, the institutional and coordination framework for ensuring product quality is one of the important aspects for successful market access and contributes to enhancing enterprise competitiveness and sustaining customer satisfaction. Poor quality of products was consistently cited by stakeholders as a major constraint to manufacturing sector SMME growth and development. In addition, stakeholders expressed concern regarding inadequate national technical infrastructure where roles of institutions are uncoordinated and not clearly spelt out.

Recommendations

13. Government should conduct an assessment of the institutional framework for standards development, standards setting and implementation agencies and the state of standards and certification infrastructure in Botswana.

14. Government should enhance the institutional framework to promote the coordination of manufacturing sector including quality assurance and standards management.

15. Government should develop a national strategy on the development of technical infrastructure for standards and certification.

The Government of Botswana developed the Industrial Upgrading and Modernisation Programme to address the lack of sophistication of products. However, the implementation of the IUMP has stalled due to lack of funds. IUMP is a broad-based programme that covers a wide spectrum of issues such as product quality standards, technology and human capital development specifically at firm level. If implemented effectively, it is likely to address some of the key constraints that manufacturing SMMEs experience.

Recommendation

16. Government should develop a fund for the implementation of the IUMP.

The Industrial Policy serves as an overarching policy framework guiding the role of the industry in spearheading economic development. The Special Economic Zones and the Cluster Development Programme are aspects of the Industrial Development Policy. However, they are not aligned in certain areas such as choice of priority sectors.

Recommendation

17. Instruments of Industrial Development Policy should be harmonised and aligned in terms of identifying industrial priority sectors.

Stakeholders expressed concern that some licensing requirements, such as building control regulations are stringent, and go beyond safety and environmental requirements for a manufacturing establishment. These requirements cause delays in the issuing of licenses.

Recommendations

18. Government should undertake an assessment of the regulatory environment within which the manufacturing SMMEs operate, with a view to reduce the regulatory burden faced by SMMEs.

19. Licensing requirements should, without compromising safety, health and environmental regulations, be customised to the type of business that is being licensed to avoid undue delays.

20. Government should in partnership with relevant institutions devise a long-term financing plan aimed at committing to this strategy.

Access to infrastructure such as electricity, water, information and telecommunication technology affect enterprise performance and competitiveness. While enterprise survey results indicate that unavailability of infrastructure was not major constraint for manufacturing firms, micro and small manufacturing firms bore the greatest burden in terms of high costs of utilities (electricity, power, and ICT). Access to serviced land was also identified as one of the constraints to production since a majority of enterprises (76%) operated in rented/leased premises and enterprises found rentals for leased land expensive. Mauritius established technology centres and clusters (ICT, footwear, and, textile clusters) to enhance the competitiveness of SMMEs.

Recommendation

21. Government should, in partnership with the private sector, build industrial parks with subsidised utility costs for small and micro manufacturing enterprises.

Diamond Manufacturing Infrastructure

Successful beneficiation in the manufacturing sector is hindered by inadequate local skills and lack of relevant technical infrastructure (laboratories and certification facilities).

Recommendations

22. Government should expedite the establishment of the diamond training school in order to improve the skills of nationals on diamond polishing and cutting as well as jewellery making.

23. Government should develop technical infrastructure such as laboratories and certification facilities to promote diamond beneficiation.

Value Mapping and Analysis of Priority Sectors

The local value chains offer opportunities for manufacturing SMMEs. However, in Botswana some products are exported as semi-processed goods. Products such as hides and skins as well as rough diamonds are exported as semi-processed goods and imported as finished products, e.g. leather, bags, shoes and polished diamond.

Recommendation

24. Government should promote further processing of products that are currently exported in a semi-processed form.

Opportunities for manufacturing SMMEs have been identified in regional value chains. However, there are bottlenecks in the region that inhibit full production potential of SMMEs.

Recommendation

25. Government should develop a strategy to promote the participation of SMMEs in regional value chains. The strategy should address how Government and relevant stakeholders will remove these bottlenecks in order to enhance the participation of SMMEs in these value chains which will include supportive policies and a conducive business environment under which SMMEs operate.

In an effort to develop the leather industry in Botswana, there have been plans to establish the Leather Industry Park. This is expected to address the limiting constraints in the leather value chain and revive the leather industry. Furthermore, the leather park is expected to offer opportunities for SMMEs to increase further processing of raw hides and skins. Feasibility studies were undertaken, however, project implementation has not commenced.

Recommendation

26. The implementation of the Leather Industry Park should be expedited.

Across manufacturing, value creation relies upon technical know-how and expert knowledge. The skills that an entrepreneur possess are vital to the success of a business. However, lack of skilled workforce has been identified as a one of the major obstacles in the manufacturing sector; local training institutions do not offer industry related courses.

Recommendation

27. Government should collaborate with the private sector to coordinate the development of skills required by manufacturing entities.

Technological advancement is necessary if SMMEs are to take opportunities in the identified value chains as it contributes to productivity as well as product quality improvement. Low technology uptake inhibits SMMEs from taking opportunities in the manufacturing sector.

Experience elsewhere, for example, the Philippines suggests that a Government department charged with the responsibility for technology support, has through its Small Enterprises Technology Upgrading Programme, addressed SMME needs in areas such as technology assessment and technology sourcing; provision of seed fund for technology acquisition; establishment of product standards, development of networks of accredited regional product-testing laboratories.

Recommendation

28. Strengthen Research and Development (R&D) for the manufacturing sector. R&D institutions should form close collaboration with each other and SMMEs in the development of appropriate technology for SMMEs to easily adopt and hence produce quality goods and become competitive.

Partnerships and Incentive Policies

The government of Botswana has made efforts to support growth of the manufacturing SMMEs for both export oriented firms and those serving the local market. These efforts include fiscal incentives such as reduced corporate income tax and certain exemptions on VAT and sales tax as well as incentives offered by SPEDU and SEZA. Botswana's manufacturing sector is still at an infancy stage and therefore needs incentives to develop.

Recommendation

29. Government should introduce additional fiscal incentives such as tax holidays, and further tax reductions or exemptions on imports, exports, labour, capital etc., in order to promote growth of the sector.

Institutions such as NFTRC, Botswana Innovation Hub (BIH), BITRI, BIUST are instrumental in innovation and technology development. One of the critical challenges in technology development is that assistance provided by institutions such as BIH and BITRI do not bear the expected results. This is because assistance provided by these institutions does not translate into commercialisation of prototypes.

Recommendation

30. Government in partnership with the private sector and other stakeholders should develop a framework that facilitates commercialisation of prototypes.

Adequate human and financial resources accompanied by adequately designed programmes that are also implemented effectively is likely to have a positive effect of SMME development. Botswana could draw lessons from these Asian countries which have put SMME development at the centre of their development agenda through a more coordinated approach.

Recommendation

31. Botswana should establish a National Council for SMME development whose task is to coordinate SMME policy-related interventions, with clearly defined indicators to track performance, chaired by His Honour the Vice President, with Ministry of Investment Trade and Industry providing secretarial services.

10.2.2. CEDA's Recommendations

CEDA's Support Structure

There is a discrepancy between CEDA and other organisations such as LEA and BITC in dealing with capacity issues relating to business development and mentoring of entrepreneurs. Stakeholders who suggested that business advisory services should be improved beyond the current levels underscored this view.

Recommendations

32. CEDA should adopt a more coordinated approach to business advisory and liaise with all institutions involved in manufacturing SMME development.

33. CEDA should establish a specialised unit that specifically serves the needs of manufacturing SMMEs.

Business advisory services such as mentoring and training are key in realising sustained SMME competitiveness. During stakeholder interviews it emerged that business advisory services are not adequate.

Recommendation

34. CEDA should develop a mentorship programme focused on building capacity of manufacturing SMMEs, with a holistic M&E framework that informs the provision of these services.

Technology is crucial in the success of manufacturing enterprises. Financing technology development and adaptation is crucial as it enhances the competitiveness of manufacturing SMMEs.

Recommendation

35. In collaboration with institutions like LEA and BIH that have established technology/business incubators, CEDA should strengthen existing partnerships with a view to promoting SMME technology development and enhance its business advisory services.

The failure rate of local enterprises is significant and is partly due to the absence of an SMME competitiveness assessment tool designed to monitor performance. Malaysia has developed an SMME competitiveness tool (SCORE) to assess SMMEs competitiveness. While the Malaysian tool is desirable for adaptation, it requires considerable financial resources and could be considered for adoption in the long-term. In the region, there are other institutions which run similar programmes such as B&M Analysts. B&M Analysts offers competitiveness assessments, monitoring and evaluation of industry upgrading programmes, cluster strategy assessments and training and mentoring services among others.

Recommendations

36. In the interim, it is recommended that CEDA should consider engaging the services of B&M Analysts or similar institutions to design and implement SMME competitiveness appraisal programmes.

37. For complex manufacturing projects, established as such by set criteria, independent industry experts should augment CEDA's Management Investment Committee during proposal assessment.

Existing firms do not have the capacity to transition into export-oriented manufacturing. In addition, the requirements to financing manufacturing start-ups are high. But CEDA does not have a dedicated facility to promote such.

Recommendation

38. In order to increase capacity of existing firms, attract new entrants and new export- oriented firms, CEDA should consider introducing specific incentives to these firms. These incentives could include lower interest rates as well as longer grace and repayment periods.

A review of skills set at CEDA shows that PEs have a wealth of experience in what they do, but lack technical expertise required for the manufacturing sector such as product development and product quality skills.

Recommendation

39. CEDA should evaluate the impact of its activities on a continuous basis, with a view to identify and upgrade skills that are required to propel the manufacturing sector.

A review of the CEDA's internal processes has revealed that CEDA's business proposal assessment tool does not consider the unique and changing needs of the manufacturing sector. The assessment tool remains static and its application is uniform across all sectors.

Recommendation

40. CEDA's business proposal evaluation process should be aligned to the unique needs of the respective SMME categories within the manufacturing sector.

As one of its objectives of promoting the manufacturing sector, CEDA sets aside a certain proportion of its loanable funds specifically for the manufacturing sector. In the past two years, this has been set at 25 percent of total loanable funds. Despite this initiative, the bulk of prospective manufacturing firms are not forthcoming with applications for loans.

Recommendation

41. Identify priority manufacturing focus areas and embark on an awareness campaign to prospective entrepreneurs of the opportunities in the manufacturing sector in order to inculcate interest in the sector and submit applications for funding in the sector.

SMMEs tend to have inadequate capacity to analyse the different financing options and understand complex loan application procedures due to low levels of financial literacy. This places a further constraint on SMMEs' access to finance.

Recommendations

42. CEDA should strengthen its business advisory services, to include, the development of SMME financial literacy programmes in collaboration with training institutions, universities, financial institutions, development partners and other stakeholders.

43. CEDA should intensify funding of support programmes on quality standards and certification.

Affordable trade finance is one of the key enabling factors for SMMEs to engage in international trade. Evidence from stakeholder interviews revealed that while trade finance may be one of the products offered by commercial banks, access may be limited by the costs associated with it. For SMMEs, these costs may be prohibitive.

Recommendations

44. CEDA should investigate the feasibility of introducing SMME needs-based diversified financial products to improve access to finance by SMMEs.

45. CEDA should conduct an assessment that identifies and investigates barriers on trade finance for SMMEs engaged in international trade, with a view to introducing the facility to support small and medium-sized firms.

Strengthening links between franchises and food processors enhances market access opportunities for SMME food processors as demonstrated in South Africa. This was largely due to flexible procurement practices of franchises as well as technical and financial assistance to SMMEs that enhanced product quality and improved market access.

Recommendation

46. CEDA should investigate the feasibility of using franchises as a strategy for market access and product quality improvement with a view to enhancing market access opportunities for CEDA-funded food processing SMMEs.

The shortcoming of CEDA's business advisory model is that the needs assessment of skills gap is conducted after the enterprises have already been funded. Some of these businesses do not have the capacity to produce, and this often leads to failure to meet orders.

Recommendation

47. CEDA should develop a needs-based mentoring and support programme on quality standards and certification focused on building capacity and technical skills in the different subsectors.

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Annex 1: Sampled Respondents by Locality and Subsectors

Location/ Division	Food products	Beverages	Textiles	Wearing Apparel	Leather and related products	Wood, straw and plaiting material	Paper	Printing	Chemicals	Rubber and plastics	Other Non-metallic Mineral	Basic metal
Francistown	12	1	5	6	1	2	1	5	4	1	8	1
Gaborone	41	5	10	34	2	8	4	31	14	7	13	8
Kanye	5	0	0	5	1	0	0	1	0	0	4	0
Letlhakane	4	0	1	1	0	0	0	1	0	0	2	0
Lobatse	6	0	1	3	1	0	0	1	0	1	1	0
Mahalapye	9	0	1	3	0	0	0	1	0	0	4	0
Maun	10	1	2	5	1	1	0	2	1	1	1	0
Mogoditshane	7	1	1	2	1	0	0	2	1	1	5	0
Molepolole	8	0	0	5	0	0	0	0	0	0	1	0
Palapye	7	1	1	5	0	1	1	1	0	0	3	1
Selebi-Phikwe	7	0	2	4	0	0	0	1	1	0	3	0
Serowe	6	0	1	4	0	0	0	2	0	0	2	0
Tlokweng	5	1	2	2	0	0	0	0	1	0	3	0
TOTAL	**127**	**10**	**27**	**79**	**7**	**12**	**6**	**48**	**22**	**11**	**50**	**10**

Fabricated Metal	Computer, Electronic and Optical Products	Electrical equip	Mach and equip	Motor vehicles	Furniture	Other manufacturing	Repair and Installation	TOTAL
6	0	0	1	1	2	2	9	68
15	3	5	4	3	12	13	17	249
2	0	0	0	0	0	0	0	18
3	0	0	0	0	0	0	2	14
1	0	0	0	0	0	0	0	15
0	0	0	0	0	0	0	1	19
3	0	0	0	0	0	0	2	30
5	0	1	0	1	1	1	2	32
1	0	0	0	0	0	0	0	15
1	0	0	0	0	0	0	1	23
3	0	0	0	0	0	0	3	24
1	0	0	0	0	0	0	1	17
2	0	0	0	0	1	0	2	19
43	3	6	5	5	16	16	40	543

Annex 2: BISIC Codes for the Manufacturing Sector

BSIC Code	DESCRIPTION
	MANUFACTURING
	Manufacture of Food Products
1010	Processing and Preserving of Meat
1020	Processing and Preserving of Fish, Crustaceans and Molluscs
1030	Processing and Preserving of Fruit and Vegetables
1040	Manufacture of Vegetables and Animal Oils and Fats
1050	Manufacture of Dairy Products
	Manufacture of Grain Mill Products, Starches and Starch Products
1061	Manufacture of Grain Mill Products
1062	Manufacture of Starches and Starch Products
	Manufacture of Other Food Products
1071	Manufacture of Bakery Products
1072	Manufacture of Sugar
1073	Manufacture of Cocoa, Chocolate and Sugar Confectionery
1074	Manufacture of Macaroni, Noodles, Couscous and Similar Farinaceous Products
1075	Manufacture of Prepared Meals and Dishes
1079	Manufacture of Other Food Products NEC
1080	Manufacture of Prepared Animal Feeds
	Manufacture of Beverages
1101	Distilling, Rectifying and Blending of Spirits
1102	Manufacture of Wines
1103	Manufacture of Malt Liquors and Malt
1104	Manufacture of Soft Drinks, Production of Mineral Waters and Other Bottled Waters
	Manufacture of Tobacco Products
1200	Manufacture of Tobacco Products
	Manufacture of Textiles
	Spinning, Weaving and Finishing of Textiles
1311	Preparation and Spinning of Textile Fibres
1312	Weaving of Textiles
1313	Finishing of Textiles
	Manufacture of Other Textiles
1391	Manufacture of Knitted and Crocheted Fabrics
1392	Manufacture of made-up Textile Articles, except Apparel
1393	Manufacture of Carpets and Rugs
1394	Manufacture of Cordage, Rope, Twine and Netting
1399	Manufacture of Other Textiles NEC
	Manufacture of Wearing Apparels
1410	Manufacture of Wearing Apparel, except Fur Apparel
1420	Manufacture of Articles of Fur
1430	Manufacture of Knitted and Crocheted Apparel
	Manufacture of Leather and Related Products
	Tanning and Dressing of Leather, Manufacture of Luggage, Handbags, Saddlery and Harness, Dressing and Dyeing of Fur
1511	Tanning and Dressing of Leather, Dressing and Dyeing of Fur
1512	Manufacture of Luggage, Handbags and the Like, Saddlery and Harness
1520	Manufacture of Footwear

	Manufacture of Wood and of Products of Wood and Cork, except Furniture, Manufacture of Articles of Straw and Plaiting Materials
1610	Sawmilling and Planing of Wood
	Manufacture of Products of Wood, Cork, Straw and Plaiting Materials
1621	Manufacture of Veneer Sheets and Wood-based Panels
1622	Manufacture of Builders' Carpentry and Joinery
1623	Manufacture of Wooden Containers
1629	Manufacture of Other Products of Wood, Manufacture of Articles of Cork, Straw and Plaiting Materials
	Manufacture of Paper and Paper products
1701	Manufacture of Pulp, Paper and Paperboard
1702	Manufacture of Corrugated Paper and Paperboard and of Containers of Paper and Paperboard
1709	Manufacture of Other Articles of Paper and Paperboard
	Printing and Reproduction of Recorded Media
	Printing and Service Activities Related to Printing
1811	Printing
1812	Service Activities Related to Printing
1820	Reproduction of Recorded Media
	Manufacture of Coke and Refined Petroleum Products
1910	Manufacture of Coke Oven Products
	Manufacture of Chemicals and Chemical Products
	Manufacture of Basic Chemicals, Fertilizers and Nitrogen Compounds, Plastics and Synthetic Rubber in Primary Forms
2011	Manufacture of Basic Chemicals
2012	Manufacture of Fertilizers and Nitrogen Compounds
2013	Manufacture of Plastics and Synthetic Rubber in Primary Forms
	Manufacture of Other Chemicals Products
2021	Manufacture of Pesticides and Other Agrochemical Products
2022	Manufacture of Paints, Vanishes and Similar Coatings, Printing Ink and Mastics
2023	Manufacture of Soaps and Detergents, cleaning and Polishing Preparations, Perfumes and Toilet Preparations
2029	Manufacture of Other Chemical Products NEC
2030	Manufacture of Man-made Fibres
	Manufacture of Pharmaceuticals, Medical and Botanical Products
2100	Manufacture of Pharmaceuticals, Medicinal Chemical and Botanical Products
	Manufacture of Rubber and Plastics Products
	Manufacture of Rubber Products
2211	Manufacture of Rubber Tyres and Tubes; Re-treading and Rebuilding of Rubber Tyres
2219	Manufacture of Other Rubber Products
2220	Manufacture of Plastics Products
	Manufacture of Other Non-Metallic Mineral Products
2310	Manufacture of Glass and Glass Products
	Manufacture of Non-Metallic Mineral Products
2391	Manufacture of Refractory Products
2392	Manufacture of Clay Building Materials
2393	Manufacture of Other Porcelain and Ceramic Products
2394	Manufacture of Cement, Lime and Plaster
2395	Manufacture of Articles of Concrete, Cement and Plaster
2396	Cutting, Shaping and Finishing of Stone
2399	Manufacture of Other Non-Metallic Mineral Products NEC
	Manufacture of Basic Metals
2410	Manufacture of Basic Iron and Steel
2420	Manufacture of Basic Precious and Other Non-Ferrous Metals
	Casting of Metals
2431	Casting of Iron and Steel
2432	Casting of Non-Ferrous Metals
	Manufacture of Fabricated Metal Products, except Machinery and Equipment
	Manufacture of Structural Metal Products, Tanks, Reservoirs and Steam Generators
2511	Manufacture of Structural Metal Products
2512	Manufacture of Tanks, Reservoirs and Containers of Metal
2513	Manufacture of Steam Generators, except Central Heating Hot Water Boilers
	Manufacture of Other Fabricated Metal Products; Metalworking Service Activities
2591	Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy
2592	Treatment and Coating of Metals; Machining
2593	Manufacture of Cutlery, Hand Tools and General Hardware
2599	Manufacture of Other Fabricated Metal Products NEC
	Manufacture of Computer, Electronic and Optical Products
2610	Manufacture of Electronic Components and Boards
2620	Manufacture of Computers and Peripheral Equipment
2630	Manufacture of Communication Equipment
2640	Manufacture of Consumer Electronics
	Manufacturing of Measuring, Testing, Navigating and Control Equipment; Watches and Clocks
2651	Manufacturing of Measuring, Testing, Navigating and Control Equipment
2652	Manufacturing of Watches and Clocks
2660	Manufacture of Irradiation, Electro-medical and Electro-therapeutic Equipment
2670	Manufacture of Optical Instruments and Photographic Equipment
2680	Manufacture of Magnetic and Optical Media
	Manufacture of Electrical Equipment
2710	Manufacture of Electric Motors, Generators, Transformers and Electricity Distribution and Control Apparatus
2720	Manufacture of Batteries and Accumulators
	Manufacture of Wiring and Wiring Devices
2731	Manufacture of Fibre Optic Cables
2732	Manufacture of Other Electronic and Electric Wires and Cables
2733	Manufacture of Wiring Devices
2740	Manufacture of Electric Lighting Equipment
2750	Manufacture of Domestic Appliances
2790	Manufacture of Other Electrical Equipment
	Manufacture of Machinery and Equipment NEC
	Manufacture of General-Purpose Machinery
2811	Manufacture of Engines and Turbines, except Aircraft, Vehicle and Cycle Engines
2812	Manufacture of Fluid Power Equipment
2813	Manufacture of Other Pumps, Compressors, Taps and Valves
2814	Manufacture of Bearings, Gears, Gearing and Driving Elements
2815	Manufacture of Ovens, Furnaces and Furnace Burners
2816	Manufacture of Lifting and Handling Equipment
2817	Manufacture of Office Machinery and Equipment,(except Computers and Peripheral Equipment)
2818	Manufacture of Power- Driven Hand Tools
2819	Manufacture of Other General-Purpose Machinery
	Manufacture of Special-Purpose Machinery
2821	Manufacture of Agricultural and Forestry Machinery
2822	Manufacture of Metal-Forming Machinery and Machine Tools

2823	Manufacture of Machinery for Metallurgy
2824	Manufacture of Machinery for Mining, Quarrying and Construction
2825	Manufacture of Machinery for Food, Beverages and Tobacco Processing
2826	Manufacture of Machinery for Textile, Apparel and Leather Production
2829	Manufacture of Other Special-Purpose Machinery
	Manufacture of Motor Vehicles, Trailers and Semi-Trailers
2910	Manufacture of Motor Vehicles
2920	Manufacture of Bodies (Coachwork) for Motor Vehicles; Manufacture of Trailers and Semi-Trailers
2930	Manufacture of Parts and Accessories for Motor Vehicles
	Manufacture of Other Transport Equipment
	Building of Ships and Boats
3012	Building of Pleasure and Sporting Boats
	Manufacture of Transport Equipments NEC
3091	Manufacture of Motor Cycles
3092	Manufacture of Bicycles and Invalid Carriers
3099	Manufacture of Other Transport Equipments NEC
	Manufacture of Furniture
3100	Manufacture of Furniture
	Other Manufacturing
	Manufacture of Jewellery, Bijouterie and Related Articles
3211	Manufacture of Jewellery and Related Articles
3212	Manufacture of Imitation Jewellery and Related Articles
3220	Manufacture of Musical Instruments
3230	Manufacture of Sports Goods
3240	Manufacture of Games and Toys
3250	Manufacture of Medical and Dental Instruments and Supplies
3290	Other Manufacturing NEC
	Repair and Installation of Machinery and Equipment
	Repair of Fabricated Metal Products, Machinery and Equipment
3311	Repair of Fabricated Metal Products
3312	Repair of Machinery
3313	Repair of Electronic and Optical Equipment
3314	Repair of Electrical Equipment
3315	Repair of Transport Equipment, except Motor Vehicles
3319	Repair of Other Equipment
3320	Installation of Industrial Machinery and Equipment

ANNEXES

Annex 3: List of Organisations and Stakeholders Consulted

NAME	ORGANISATION	DESIGNATION
Mr. G. Mmolawa	MITI	Director (International Trade)
Ms. C. Kelaotswe	MITI	Principal Trade Officer
Ms. H. Moleofe	MITI	Senior Trade Officer
Mr. M. Ntsima	MITI	Chief Trade Officer
Ms. J. Segotlong	MITI	Chief Trade Officer
Mr. M. Martin	MITI	Principal Trade Officer
Ms. P. Motshwane	MITI	Principal Trade Officer
Ms. T. Motsumi	PPADB	Director (Services)
Mr. L. Kennekae	PPADB	Divisional Manager (Services)
Tema	PPADB	Divisional Manager (Works)
K. Modise	PPADB	Senior Legal Officer
Ms. G. Selelo	PPADB	
Mr. T.D. Ntapu	BITC	Director (Strategy and Competitiveness)
Mr. T. Nleya	BITC	Manager (Investment Promotion)
Mr. G. Molatlhegi	BITC	
Mr. K. Sebele	BITC	
Dr. B. Tacheba	Botswana Innovation Hub	
O. Segwagwe	Botswana Innovation Hub	
B. Rantswaneng	Botswana Innovation Hub	
Ms. J.D. Ramaphoi	Special Economic Zones Authority	Director (Investor Attraction)
Ms. K. Mogaetsho	Diamond Hub	Coordinator
Ms. T. Selaelo	Diamond Hub	
Mr. C.P. Masena	CIPA	Registrar General
Mr. A. Maringa	CIPA	
Mr. T. Moalosi	CIPA	Registrar (Industrial Property)
Ms. Monyatsi	CIPA	
Dr. M.M. Kebakile	NAFTEC	Acting Managing Director
Dr. B.S. Motswagole	NAFTEC	Senior Research Scientist
Dr.F.G. Siamisang	HRDC	Director (Human Resource Development Planning (Demand))
Mr. M. Basoki	LEA	
Mr. E. Somolekae	LEA	
Mr. N. Chankapane	LEA	
Mr. N. Matsheka	LEA	
Ms. M. Marobela	BOBS	Managing Director
Ms. C. Molenni	BOBS	
Mr. Morgan	BOBS	
Mr. Tiro	BOBS	
Mr. G. Molefhe	BOBS	
Ms. M. Seoke-Hall	BOBS	
Mr. B. Kebapetse	BOBS	
Dr. T. Fako	BOBS	
Dr. B. Mbongwe	BITRI	Director (Research and Partnerships)
Ms. B. Matlhaga	Statistics Botswana	

K. Makhumalo	Statistics Botswana	
P. Labobedi	Statistics Botswana	
K. Mandozi	Statistics Botswana	
L. Simako	Statistics Botswana	
Ms. B. Mathipa	MFED (Tax Policy Unit)	Director
Ms. T. Montsheng	MFED (Tax Policy Unit)	
Ms. D. Phuti	MYSC	Policy Specialist (Arts and Culture)
Mr. Lesiela	MYSC	
K. Mochabati	Ministry of Agriculture Development and Food Security	
K. Nkwane	Ministry of Agriculture Development and Food Security	
G. Boikanyo	Ministry of Agriculture Development and Food Security	
T. Ramolala	Ministry of Agriculture Development and Food Security	
A. Mfala	Ministry of Agriculture Development and Food Security	
Mr. T. Thamane	CEDA	CEO
Ms. Lionjanga	CEDA	Executive Management
Ms. Sebonego	CEDA	Executive Management
Ms. T. Dichi	CEDA	Executive Management
Dr. T. Mampane	CEDA	Board Member
Mr. W. Mosweu	CEDA	Board Member
Mr. G. Mosimaneotsile	CEDA	Board Member
O. Mogorosi	CEDA	Branch Network
T. Kayawe	CEDA	Product Development
G. Tsimanyana	CEDA	Information Technology
J. Moribame	CEDA	Structured Finance
T. Moeletsi	CEDA	Internal Audit
G. Showa	CEDA	Client Relations
O. Morulane	CEDA	Administration

Private Sector and Associations

NAME	ORGANISATION	DESIGNATION
Ms. B. Mbaakanyi	Botswana Textile and Clothing Association	President
Mr. L.V. Ravesteyn	Stanbic	Head personal and Business Banking
Mr. C. Chijoro	Stanbic	Head Business Banking
M. Maripe	FNBB	Chief Operations Officer
P. Sebina	FNBB	Head of SMME Banking
M. Nakedi	FNBB	Credit Department
M. Sebabole	FNBB	Chief Economist
O. Kono	FNBB	
Mr. G. Makore	Southern Africa Trade and Investment Hub	Director (Export Competitiveness)

ANNEXES

Annex 4: Implementation Plan for the Manufacturing Sector 2020/21-2024/25

Introduction

The Government of Botswana has identified the manufacturing sector as one of the sectors that could contribute to the achievement of the National Development Plan 11's objectives of employment creation and diversification of the economy. Given the importance of the manufacturing sector in the achievement of these objectives, the Government has introduced a number of initiatives geared towards the development of the manufacturing sector.

The Government has also participated in regional initiatives aimed at facilitating the growth of the manufacturing sector. Despite these initiatives, the manufacturing sector has not performed as expected.

For example, the contribution of the manufacturing sector has averaged about 5 percent for the past 10 years, with its latest contribution recorded at 5.2 percent in 2016 (Statistics Botswana, 2017).

As an agency charged with the responsibility of financing local enterprises, the Citizen Entrepreneurial Development Agency (CEDA) is committed to providing loans, mentoring and other support services to local entrepreneurs to participate meaningfully in the opportunities brought by industrial development.

To facilitate CEDA's support for the local manufacturing enterprises willing to take advantage of opportunities brought by industrialisation, CEDA conducted a study to understand the needs of the manufacturing Small, Medium and Micro Enterprises (SMMEs). Unlike previous studies undertaken in the manufacturing sector that were carried out at a macro level, the CEDA study conducted a firm level survey that analysed enterprise-level constraints of manufacturing firms.

Coupled with in-depth interviews of various stakeholders and literature review on best practice on manufacturing sector development, CEDA has come up with implementable initiatives that would help propel the growth of the manufacturing sector in Botswana.

Some of the initiatives in the Implementation Plan are beyond the purview of CEDA and involve Government, and other stakeholders. The initiatives have been organised into four thematic areas:

1. Policy Environment for the Manufacturing SMME sector;
2. Diamond Manufacturing Infrastructure;
3. Business Development Services, and
4. Value Mapping and Analysis for Priority Sectors.

These broad thematic areas are derived from the recommendations of the CEDA Manufacturing study findings and are intended to indicate the type of initiatives necessary to propel the development of manufacturing sector. The Government has to play a facilitating role through policy formulation and regulation, while CEDA has to perform its mandate in the provision of business development services.

The value chains and analysis for priority sectors among other issues provide the necessary actions to be performed to harness business opportunities in the exploitation of natural endowments and innovations.

Diamonds are the leading export revenue earner to the economy and need to be beneficiated further to derive more value from them and to diversify the economy. All these initiatives are crucial for the development of the manufacturing SMME sector.

Against this background, a five-year Implementation Plan has been drawn from these initiatives detailing a roadmap for rolling out the activities that would enhance the competitiveness of the manufacturing sector for the period 2020/21 – 2024/25. The Implementation Plan 2020/21 – 2024/25 comprises four components:

i) Action plan detailing activities for each of the strategic actions identified to realise the policy objectives with timelines. It is expected that annual work plans will be drawn from this plan, which is flexible enough to enable reprioritisation of initiatives contained in the Implementation Plan;
ii) The Plan comprises of indicators (output and performance) that would require a robust Monitoring and Evaluation Framework for monitoring, reporting and evaluating progress of the implementation of the Plan;
iii) Institutional responsibilities and key partners; and
iv) Time frames.

Part A : MINISTRY OF INVESTMENT, TRADE AND INDUSTRY

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 1	Government and parastatals should adopt a standard definition of what constitutes manufacturing with regard to targeted incentives.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Harmonise priority-manufacturing subsectors across Government and other agencies.	Identified priority manufacturing subsectors uniform across Government Ministries and agencies.	Congruence and convergence of efforts in the development, promotion and support of manufacturing subsectors across Government and its agencies.	Key Agency: MITI Partners: BITC CEDA LEA SEZA SPEDU NSO BOBS Local Authorities		x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 2	Establish a National Council for SMME development whose task is to coordinate SMME policy-related interventions, chaired by the Vice President with the Ministry of Investment Trade and Industry as the secretariat.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Establish a National Council for SMME development and coordination.	National Council established.	A National Council established with policy and oversight responsibilities over SMMEs	**Key Agency: MITI** **Partners** MFED Business Botswana CEDA LEA BITC BEMA		x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 3	Government should introduce retailer-led supplier development programmes, and to ensure compliance, the licensing conditions of retailers should stipulate a minimum proportion of manufactured goods that should be sourced from locally based manufacturing SMMEs. Capacity to enforce and monitor such provisions should also be developed to facilitate adherence with requirements.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Review retailer licensing laws and regulations.	Retailer licensing laws and regulations reviewed to incorporate supplier development programmes.	i) Licensing laws and regulations passed.	**Key Agency: MITI** **Partners** Local Authorities Business Botswana Retailers BEMA CEDA		x			
		ii) An increase in the monetary value of locally manufactured products in retail stores.						
		iii) An increase in the number of local manufacturing SMMEs supplying retail stores.						
ii) Strengthen the enforcement and monitoring capacity of licensing authorities.	i) Capacity needs assessment conducted.	i) Needs assessment report.			x			
	ii) Capacity development programmes developed.	ii) Number of capacity development programmes delivered.			x			
		iii) Number of licensing authorities' personnel trained.				x		

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 4	Government should promote the establishment of production cooperatives for manufacturing microenterprises and handicrafts as one of the initiatives to upgrade production and marketing capabilities of SMMEs.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Promote the establishment of production cooperatives for manufacturing microenterprises and handicrafts.	Production cooperatives for manufacturing microenterprises and handicrafts established.	i) Number of new manufacturing microenterprises and handicrafts established.	**Key Agency: MITI** **Partners** Local Authorities Business Botswana BEMA CEDA BITC BOBS MYSC Community Trusts		x			
		ii) Number of buyer and supplier missions that production cooperatives participate in.						
ii) Develop and implement marketing strategies and quality support programmes for manufacturing microenterprises and handicrafts.	Marketing strategies and quality support programmes developed.	i) Number of marketing strategies implemented.						
		ii) Number of production cooperatives adopting marketing programmes.				x		
		iii) Number of quality support programmes implemented.						
		iv) Number of production cooperatives adopting quality support programmes.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 5	Public procurement agencies should develop regulations in line with socio-economic provisions of the PPAD Act. These are aimed at promoting local manufacturing SMMEs through, among other interventions, reservation/set-asides (designation of a certain portion of the public procurement budget) and preference schemes targeted at locally manufactured products by SMMEs backed by strong monitoring and enforcement, and, stringent requirements for granting waiver requests.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Augment and enforce regulations on reservations/set-asides and preference schemes for local SMME manufacturers in line with the socio-economic provisions of the PPAD Act.	Regulations on reservations and preference schemes for local SMMEs manufacturers augmented and impactful.	i) Number of public procuring entities applying the regulations on reservations and preference schemes for local SMMEs manufacturers.	**Key Agency: MITI** **Partners** Local Authorities Business Botswana BEMA CEDA BITC BOBS MYSC PPADB MLGRD			x		
		ii) The value of public tenders awarded to local manufacturing SMMEs.						
		iii) The number of local SMME manufacturers participating in the scheme.				x		
ii) Strengthen the enforcement and monitoring capacity of the procuring entities.	i) Capacity needs assessment conducted.	A Needs Assessment report.						
	ii) Capacity development programmes developed.	i) Number of capacity development programmes delivered.						
		ii) Number of procuring entities' personnel trained.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 6	The Government should through the socio-economic provisions of the PPAD Act, enhance the participation of local manufacturing SMMEs by introducing price preferences for large tenderers/companies that sub-contract a set proportion or form consortiums with SMMEs.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Develop regulations in line with the socio-economic provisions of the PPAD Act on subcontracting for manufacturing SMMEs to promote their participation in the market.	Regulations on subcontracting for manufacturing SMMEs developed.	i) Number of manufacturing SMMEs participating in subcontracts.	**Key Agency: MITI** **Partners** PPADB CEDA Business Botswana LEA			x		
		ii) The value of subcontracts in which manufacturing SMMEs are participating.						
ii) Strengthen the enforcement and monitoring capacity of the procuring entities.	Capacity needs assessment conducted	i) Needs assessment report				x		
	Capacity development programmes developed	ii) Number of capacity development programmes delivered.						
		iii) Number of procuring entities' personnel trained.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 7	Procuring entities, should, set longer time period for submission of tenders on the supply of manufactured products develop and publish their multi-year procurement plans to enable local manufacturing SMMEs to effectively participate in the public procurement market.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop and publish multi-year procurement plans.	i) Multi-year procurement plans developed.	i) Number of procuring entities publishing procurement plans.	**Key Agency: MITI** **Partners** PPADB CEDA Business Botswana LEA Local Authorities All public procuring agencies			x		
		ii) Number of manufacturing SMMEs participating in the public procurement market.						
	ii) An online procurement portal developed	Number of manufacturing SMMEs using the online procurement portal.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 8	It should be made a legal requirement that, procurement entities should, at the time of advertising procurement opportunities, reference quality standards and include incentives (e.g. preferential treatment) on product quality standards as part of the evaluation criteria.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop and enforce regulations on the use of quality standards in public procurement.	Regulations on the use of quality standards in public procurement developed.	i) Number of procurement entities referencing quality standards in their tender invitations.	**Key Agency: MITI** **Partners:** PPADB CEDA Business Botswana LEA Local Authorities All public procuring agencies BOBS			x		
		ii) Value of manufactured products satisfying the required quality standards.						
		iii) Number of manufacturing SMMEs compliant with manufacturing quality standards.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 9	ITT requirements, while upholding established standards, should be simplified to enable the participation of SMMEs in government tenders.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Reduce barriers to participation in public procurement by manufacturing SMMEs.	i) Technical and financial capacities of SMMEs enhanced	i) Number of training courses & workshops held on public procurement procedures, prequalification, bid writing, financial management, etc.	**Key Agency:** **MITI** **Partners:** All Government Ministries & Departments Local Authorities Land Boards Parastatals LEA CEDA SEZA SPEDU Business Botswana	x	x			
		ii) Number of SMMEs participating in the training.						
	ii) Dialogue between SMMEs and procurement entities improved.	ι) Number of public events (meet the buyers' events) where public procurers meet with suppliers.			x			
		ii) Number of SMMEs participating in the events.						
	iii) Procurement procedures for categories dealing with SMMEs simplified	i) A procurement portal (and Open Data) established where guidance is provided on procurers' eligibility requirements and checklists, procurement procedures, procurement plans, standing offers, and provides forms and templates for SMMEs. ii) Introduction of online tendering, where payment of tender documents takes place at tender document submission.		x				
	iv) Experience and technical capacity requirements in ITTs that provide for new entrants.	Number and frequency of new entrants participating in the manufacturing sector.		x	x	x	x	x

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 10	The use of administrative data should be strengthened to ensure that data is collected, and a database developed of locally based manufacturers.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
(i) Develop a comprehensive database on manufacturing SMMEs that integrates both the central government, parastatals and local government's databases.	Database established, regularly updated and accessible to all stakeholders.	Number of manufacturing SMMEs on an operational database.	**Key Agency:** **MITI** **Partners:** CEDA LEA PPADB SEZA SPEDU Statistics Botswana Local Authorities BITC Business Botswana BEMA	x				

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 11	Government should conduct an assessment of the institutional framework for standards development, standards setting and implementing agencies and the state of standards and certification infrastructure in Botswana.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strengthen the institutional framework for standards development, standards setting and implementing agencies.	Governance framework for standards setting established.	A fully functional and well-coordinated institutional framework for standards setting	**Key Agency:** **MITI** **Partners** BOBS CEDA LEA BIUST UB BUAN NFTRC National Veterinary Laboratory National Materials Testing Centre		x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 12	Government should develop a national strategy on the development of technical infrastructure for standards and certification.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop a national strategy on the development of technical infrastructure for standards and certification.	i) A national strategy on technical infrastructure developed.	A technical infrastructure strategic plan, implementation plan and M&E framework developed and implemented.	**Key Agency: MITI** **Partners** BOBS CEDA LEA BIUST UB BUAN NFTRC National Veterinary Laboratory National Materials Testing Centre		x			
	ii)Certification infrastructure developed and accredited.	Number of certifying laboratories built and accredited						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 13	Government should develop a fund for the implementation of the Industrial Upgrading and Modernisation Programme (IUMP).							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Set up a fund for implementation of the IUMP.	IUMP fund developed.	Number of IUMP initiatives funded and implemented.	**Key Agency: MITI** **Partners** BOBS Business Botswana BEMA BITC Commercial Banks BNPC BITRI CEDA LEA BIH Tertiary institutions	x				

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 14	Government should undertake an assessment of the regulatory environment within which the manufacturing SMMEs operate, with a view to reduce the regulatory burden faced by SMMEs.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Regulatory impact assessment pre and post implementation of regulations.	Review report on SMME regulatory environment.	Reduced regulatory burden faced by SMMEs.	**Key Agency: MITI** **Partners** BOBS Business Botswana BEMA BITC CEDA PPADB Local Authorities SEZA SPEDU	x				

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 15	Government should, in partnership with the private sector, build industrial parks with subsidised utility costs for small and micro manufacturing enterprises.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop industrial parks in partnership with the private sector.	Industrial parks developed through public – private partnerships initiative.	i) Number of industrial parks developed in both urban and rural areas. ii) Number of manufacturing SMMEs operating in the industrial parks	**Key Agency: MITI** **Partners** MITI BPC WUC BTCL Land Authorities CEDA LEA SEZA SPEDU BITC Business Botswana BEMA BIH		x	x	x	x

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 16	Government in partnership with the private sector and other stakeholders should develop a framework that facilitates commercialisation of prototypes.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Establish entrepreneurship development programmes at engineering and R&D institutes for goal-directed promotion of commercialisation of prototypes.	Enhanced links between actors of innovation ecosystem and commercialisation of innovations.	Number of commercialised prototypes.	**Key Agency: MITI** **Partners** BIH BITRI Tertiary institutions Business Botswana Commercial Banks CEDA LEA BDC NFTRC BITC BEMA CIPA	x	x			
ii) Mobilise funding from various sources such as angel investors, crowd funding, venture capital, etc., for commercialisation of prototypes.	A framework for the facilitation of the different funding options established.	Number of funding options available for the commercialisation of prototypes.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 17	Government should enhance the institutional framework to promote the coordination of manufacturing sector including quality assurance and standards management.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strengthen the coordination framework to enhance the governance of institutions involved in the regulation, quality assurance and promotion of the manufacturing sector.	i) A national strategy strengthening the institutional, regulatory and operational environment developed.	Reduced incidences of contradictions and duplication of efforts from institutions involved in the governance of the manufacturing sector.	**Key Agency: MITI** **Partners** MFED MoA MIST BIH BITRI Business Botswana Commercial Banks CEDA LEA BDC NFTRC BITC BEMA SEZA SPEDU BOBS Academic institutions		x			
	ii) A coordinator for manufacturing SMMEs with oversight authority established within the Ministry.	ι) Compliance and adoption of guidelines and strategies governing the manufacturing sector. ιι) Number of the manufacturing SMME programmes developed and implemented.				x		
	iii) Coordination capacity for quality control and standards strengthened.	i)Clear roles and coherence of quality assurance and standards agencies ii) Increased compliance by SMMEs on quality standards.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 18	Strengthen Research and Development for the manufacturing sector.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strengthen collaboration between R&D institutions and SMMEs.	Memorandum of Understanding (MoU) between R&D institutions and other forms of collaboration between R&D institutions and SMMEs developed.	i) The number of MoUs signed and number of tangible initiatives emanating from these partnerships. ii) Number of SMMEs applying the technology they derived from collaborative relations with R&D institutions.	**Key Agency: MITI** **Partners:** MoA MIST BIH BITRI Academic institutions CEDA LEA NFTRC BEMA		x			
Develop technology upgrading programme for SMMEs	ι) Technology upgrading programme for SMMEs developed. ιι) Outreach programmes for technology upgrading developed and implemented.	ι) Number of technology upgrading programmes developed and delivered. ιι) Number of SMMEs receiving information on technology upgrading programmes	**Agency: MITI** **Partners:** MoA MIST BIH BITRI Academic institutions CEDA LEA NFTRC BEMA			x		

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 19	Government should promote further processing of products that are currently exported in semi-processed form.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Promotion of further processing of products currently exported in semi-processed form.	i) Sector specific assessment of products exported in semi-processed state undertaken.	Assessment reports.	**Key Agency: MITI** **Partners:** LEA SEZA BITC MOA SPEDU CEDA	x				
	ii) An incentive structure for the promotion of further processing of goods developed and implemented.	The share of finished products as a proportion of total exports.			x			
ιιι) Undertake an assessment of the feasibility of value chain financing	An assessment report produced on the feasibility of value chain financing.	Financing options for value chains in place and operational.				x		

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 20	Government should develop the value chain strategy to promote the participation of SMMEs in regional value chains.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strategy developed to engage SMMEs in regional value chains.	Strategy to engage SMMEs in regional value chains developed and implemented.	Number of SMMEs involved in regional value chains.	**Key Agency: MITI** **Partners:** CEDA BITC SEZA SPEDU	x				

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 21	Instruments of Industrial Development Policy should be harmonised and aligned for identifying industrial priority sectors							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Harmonise the Industrial Development Policy instruments/ programmes (e.g. AGOA, IUMP, NDP, etc.) for identifying priority sectors.	i) Industrial development policy instruments or programmes evaluated and harmonised.	Evaluation reports available to inform future interventions.	**Key Agency**: **MITI** **Partners**: CEDA BITC SEZA SPEDU LEA MFED BEMA Business Botswana	x				
	ii) Priority sectors uniform across all implementing agencies.	Number of agencies applying similar instruments or programmes in identifying priority sectors.		x				

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 22	Licensing requirements should, without compromising safety, health and environmental regulations, be customised to the type of business that is being licensed to avoid undue delays.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop supportive sector specific licensing requirements.	Manufacturing subsector specific licensing requirements developed.	Application of subsector specific licensing requirements.	**Key Agency: MITI** **Partners:** LEA Local Authorities Business Botswana BEMA	x				

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 23	Devise a long-term financing plan for implementation of the manufacturing strategy.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop a financing strategy for the implementation of manufacturing SMMEs initiatives and programmes.	Financing strategy developed.	i) Number of initiatives and programmes implemented. ii) Number of SMMEs accessing the various funding programmes and schemes.	**Key Agency: MITI** **Partners:** MITI Commercial banks LEA SEZA CEDA	x				

Part B: CEDA AND OTHER STAKEHOLDERS

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 24	CEDA should adopt a more coordinated approach to business advisory services and liaise with all institutions involved in manufacturing SMME development.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strengthen business development services to manufacturing SMMEs.	A business advisory services coordination framework for CEDA supported manufacturing SMMEs developed.	A fully functional and well-coordinated business development services for SMMEs.	**Key Agency: CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners BIUST UB BAC NFTRC BOBS BIH MIT	x				

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 25	CEDA should establish a specialised unit that specifically serves the needs of manufacturing SMMEs.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Set up a dedicated unit for the manufacturing sector	A fully functional manufacturing sector unit.	Growth in performance of the manufacturing sector within the CEDA portfolio	**Key Agency:** **CEDA**		x			

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 26	In the interim, CEDA should consider engaging the services of B&M Analysts or similar institutions to design and implement, in partnership with other institutions responsible for SMME development, SMME competitiveness appraisal programmes.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Design and implement SMMEs' competitiveness appraisal programmes in collaboration with other actors.	SMMEs competitiveness appraisal programmes designed and implemented.	i) The number of SMMEs participating in the competitiveness appraisal programmes. ii) The number of targeted interventions implemented, and evaluated.	**Key Agency:** **CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners Tertiary institutions NFTRC BOBS BIH MITI		x			

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 27	Develop a needs-based mentoring and support programme on quality standards and certification focused on building capacity and technical skills in the sub-sectors.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop and implement outreach programmes for SMMEs on quality standards and management, and other technical services.	Outreach programmes for SMMEs developed.	Number of SMMEs receiving information on quality standards and other services.	**Key Agency:** CEDA **Partners:** NFTRC BITRI Tertiary institutions LEA BOBS		x			

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 28	For complex manufacturing projects, established as such by set criteria, independent industry experts should augment CEDA's Management Investment Committee during proposal assessment.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Augment CEDA management investment committee with independent industry experts for the assessment of complex manufacturing projects.	i) Criteria for the determination of complexity of projects developed.	Number of manufacturing SMMEs on whose business proposals the criteria has been applied.	**Key Agency:** **CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners Tertiary institutions BIH MITI	x				
	ii) Manufacturing project proposals evaluated by a team comprising industry experts.	Number of proposals assessed by a team comprising independent industry experts.			x			

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 29	CEDA's business proposal evaluation process should be aligned to the unique needs of the respective SMME categories within the manufacturing sector.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Review the CEDA business proposal evaluation process to align it to various manufacturing SMME sub-sectors.	Business proposal evaluation process reviewed and updated accordingly.	Different business categories assessed with appropriate evaluation tools.	**Key Agency:** **CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners BIUST UB BAC NFTRC BOBS BIH MITI	x				

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 30	Investigate the feasibility of SMMEs using franchises as a strategy for market access and product quality improvement with a view to enhancing market access opportunities for CEDA- funded food processing SMMEs.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
CEDA embarks on the identification of franchisors with interest in working with SMMEs.	A report identifying franchisors with interest in collaborating with SMMEs.	i) Number of collaborations between franchisors and food processing SMMEs. ii) Number of SMMEs accessing the franchise market.	**Key Agency**: CEDA **Partners:** LEA MITI BOBS Business Botswana BEMA	x				

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 31	CEDA should develop a mentorship program focused on building capacity of manufacturing SMMEs, with a holistic M&E framework that informs the provision of these services.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop a mentorship and consulting programme for manufacturing SMMEs	Mentorship and consulting programmes developed and implemented that focus on: • Sales and marketing; • Production operations and ICT; • HR management; • Financial management; • Strategic management; and • Regulation.	A mentoring and consulting framework developed that targets start-ups, high growth SMME companies and internationalised enterprises.	**Key Agency:** **CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners BOBS			x		
Develop an M&E framework for business development services.	An M & E system developed that encompasses an M&E policy, practices and processes that enable data collection and analysis.	Mid-term review and end of programmes evaluation reports.		x		x		x

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 32	CEDA should evaluate the impact of its activities on a continuous basis, with a view to identify and upgrade skills that are required to propel the manufacturing sector.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicators**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	**2021/22**	**2022/23**	**2023/24**	**2024/25**
i) Assess and evaluate CEDA's skills development services with regard to training, consulting and information brokerage services.	ι) Information support programmes assessed and evaluated.	Business development services impact assessment and evaluation reports (for information brokerage, training programmes, and reviewed consulting services).	**Key Agency: CEDA** **Partners:** LEA BITC Commercial Banks BITRI BEMA Business Botswana Development Partners BOBS Tertiary Institutions		x			
	ιι) Training programmes for the different categories (start-ups, high growth enterprises, internationalised enterprises) of SMMEs reviewed and properly aligned.				x			
	iii)Consulting services reviewed.	Number of business development services aligned to SMMEs' needs.			x			
ii) Assess and evaluate CEDA skills set on its business advisory services for the manufacturing sector.	Assessment and evaluation of the skills' sets completed.	ι) Number of training courses attended by CEDA employees.			x			
		ιι) Number of employees who have undergone training.						
		ιιι) Monitoring and evaluation of CEDA's business advisory services staff development programmes.						

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 33	CEDA should strengthen its business advisory services to include, the development of SMME financial literacy programmes in collaboration with training institutions, universities, financial institutions, development partners and other stakeholders.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicators**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	**2021/22**	**2022/23**	**2023/24**	**2024/25**
i) Develop an SMME financial literacy programme.	Financial literacy programme for SMMEs developed.	ι) Number of SMMEs that have participated in the financial literacy programme. ιι)M&E reports on financial literacy programme.	**Key Agency: CEDA** **Partners:** LEA MITI BDC BITC BEMA Business Botswana Tertiary institutions Commercial banks	x				
ii) Promote, fund and monitor e-training for SMMEs	i) E-training programmes for SMMEs introduced.	Uptake of e-training programmes.			x			
	ii) M&E programme designed for the e-training programmes.	E-training M&E reports.			x			
iii) Strengthen collaboration between CEDA and training institutions, universities, financial institutions and development partners on financial management capacity building programmes for SMMEs.	i) Enhanced partnerships on the design, coordination, implementation and monitoring of financial literacy training programmes for SMMEs.	i) Increase in the number of MoUs, and their operationalisation, with capacity building institutions.			x			
		ii) Number of collaborative programmes.						
	ii) A functional implementation and monitoring framework developed for the training programmes.	M&E reports for the training programme.			x			

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 34	In collaboration with institutions such as LEA and BIH, that have established technology/business incubators, CEDA should strengthen existing partnerships with a view to promoting SMME technology development and enhance its business advisory services.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicator**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	2021/22	2022/23	2023/24	2024/25
Promote partnerships between R&D institutes, universities, industrial extension agencies and manufacturing enterprises.	New partnerships established and existing ones strengthened.	i) Number of MoUs established and new partnerships formed between CEDA and R&D institutions, industrial extension agencies and manufacturing SMMEs. ii) Number of tangible initiatives from partnerships. iii) Increase in the number, and improvement in quality, of programmes from existing partnerships.	**Key Agency: CEDA** **Partners:** LEA BIH BEMA	x				

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 35	Identify priority manufacturing focus areas and embark on an awareness campaign to prospective entrepreneurs of the opportunities in the manufacturing sector in order to inculcate interest in the sector and submit applications for funding in the sector.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicators**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Promote identified priority manufacturing focus areas.	Incentives for the promotion of priority manufacturing focus areas developed.	Number of incentives applied to priority manufacturing subsectors.	**Key Agency: CEDA** **Partners:** LEA MITI BDC BITC BEMA Business Botswana SEZA			x		
ii) Develop and implement a public awareness and information dissemination programme on priority sub-sectors.	Public awareness and information dissemination programme developed.	i) Public awareness and information dissemination programme reports. ii) Proportion of CEDA loans allocated to priority manufacturing sub-sectors.				x		

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 36	Investigate the feasibility of introducing SMME needs-based diversified financial products to improve access to finance SMMEs.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicators**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	2021/22	2022/23	2023/24	2024/25
Conduct a needs assessment for SMME financial products.	i) Assessment of possible financing products for SMMEs undertaken.	Assessment report on financing products for SMMEs.	**Key Agency: CEDA** **Partners:** MITI Commercial banks LEA SEZA NDB		x			
	ii) New SMME financial products introduced.	i) Number of new SMMEs financing products. ii) Number of SMMEs accessing the new financing products.				x		

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 37	In order to increase capacity of existing firms, attract new and new export oriented firms, CEDA should consider introducing specific incentives to these firms. These incentives could include lower interest rates, longer grace and repayment periods.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	**Output Indicator**	**Performance Indicators**	**Responsible Institution**	**Time Frame**				
				2020/21	2021/22	2022/23	2023/24	2024/25
Enhance financial and related (e.g. longer grace and repayment periods) incentives to attract new and existing export-oriented firms.	Criteria for accessing financial and related incentives developed.	i) Criteria for accessing financial and related incentives in place. ii)Number of manufacturing firms benefitting from CEDA incentive schemes.	**Key Agency:** CEDA **Partners:** MITI Commercial banks LEA SEZA	x				

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 38	Assessment of trade finance barriers for SMMEs engaged in international trade, with a view to introduce the facility to support small and medium-sized firms.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Undertake an assessment on barriers to international trade finance for SMMEs with a view to introducing the facility to support SMMEs.	i) Assessment on barriers to trade finance for SMMEs undertaken.	Assessment reports on trade finance barriers.	**Key Agency: CEDA** **Partners:** MITI Commercial banks LEA SEZA		x			
	ii) International trade finance facility established.	i) Number of SMMEs accessing international trade finance.				x		
		ii) Number of SMMEs accessing the new financing products.						

Theme	Business Development Services							
Objective	To strengthen the sophistication of enterprise operations and strategy							
Recommendation 39	CEDA should intensify funding of support programmes on quality standards and certification.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Strategic Actions	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Increase the project facilitation fund (PFF) to enable SMMEs to obtain and maintain quality standards and certification.	A component of the PFF introduced for the maintenance of standards and certification.	Number of SMMEs that utilise the PFF for maintenance of standards and certification.	**Key Agency: CEDA** **Partners:** NFTRC BITRI Tertiary institutions LEA BIH BOBS	x				

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 40	Government and parastatals should adopt a standard definition of what constitutes manufacturing with regard to targeted incentives.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Harmonise the definition of manufacturing in all the instruments that regulate incentives in the manufacturing sector.	i) Definitions of manufacturing evaluated and instruments that regulate incentives redesigned where necessary.	Effective targeting of manufacturing incentives.	**Key Agency: MFED** **Partners:** MITI CEDA LEA SEZA SPEDU	x				
	ii) All instruments that regulate incentives are fully harmonised.	Evaluation reports available to inform future interventions.			x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 41	The use of administrative data should be strengthened to ensure that data is collected, and a database developed of locally based manufacturers.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
(ii) Strengthen the collection and use of administrative data[1] among government agencies.	i) Systems developed for the collection of administrative data.	Number of government Ministries, Local Authorities and parastatals with functional data collection systems.	**Key Agency**: NSO **Partners:** Statistics Botswana CEDA LEA All Government Ministries Local Authorities Parastatals SEZA SPEDU	x	x	x		
	ii) Data storage and retrieval systems developed.	Utilisation of administrative data in the national planning and implementation of manufacturing sector SMMEs development programmes.						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 42	BOBS should introduce product quality support programmes with embedded graduation criteria for SMMEs in order to improve their market access, both locally and internationally. The product quality support programmes should include a subsidy on product standards and certification for SMMEs.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Develop and implement product quality support programmes.	i) Certification Laboratories Developed	Number of certification laboratories developed	**Key Agency:** **BOBS** **Partners:** MITI CEDA LEA SPEDU SEZA NFTRC National Veterinary Laboratory National Materials Testing Centre	x	x	x		
	ii) Certification Laboratories Accredited	Number of laboratories accredited.			x	x		
	iii) Certification of SMME companies in ISO, firm & industry standards.	% of companies adopting ISO, firm and industry standards.		x	x	x	x	x
	iv) Awareness raising programmes on the importance of quality among SMMEs and the public.	Opinion survey results measuring public and private sector awareness of the importance of quality.		x	x	x	x	x
	v) Adherence and compliance to quality standards.	Number of SMMEs complying with quality standards.						
Develop a subsidy scheme on product standards and certification.	Quality standards and certification subsidies developed and allocated.	i)The value of subsidies that benefited SMMEs		x				
		ii)Number of SMMEs benefitting from subsidies						

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 43	Government should introduce additional fiscal incentives such as tax holidays, and further tax deductions or exemptions on imports, exports, labour, capital etc., in order to promote growth of the sector.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Review and harmonise existing fiscal incentives with the view to promoting SMME manufacturing sector.	Incentive programmes evaluated and redesigned where necessary.	A range of fiscal incentives available to the SMME manufacturing sector.	**Key Agency:** **MFED** **Partners** MITI BOBS CEDA LEA SEZA SPEDU BITC		x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 44	Undertake an assessment of market access and other constraints faced by export-oriented manufacturing SMMEs with a view to determining possible areas for intervention and reform.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Undertake an assessment of market access and other constraints faced by export-oriented manufacturing SMMEs.	Actionable market access opportunities and solutions to constraints faced by SMMEs.	A report on the analysis of market access and other constraints faced by SMMEs as well as opportunities and solutions to these constraints.	**Key Agency:** **BITC** **Partners** MITI CEDA Business Botswana LEA SEZA BOBS BEMA	x				
ii) Implement the manufacturing SMMEs export development and promotion programme.	A report on SMME export development and promotion programme completed.	Number of manufacturing SMMEs enrolled on the programme.			x			

Theme	Policy Environment for the Manufacturing SMME Sector							
Objective	To improve the quality of the business environment							
Recommendation 45	BITC should strengthen the Brand Botswana campaigns, through initiatives such as mind-set change programmes that support locally produced products. These campaigns should be accompanied by a robust product quality and standards programme for SMMEs.							
Outcome	• A business friendly environment for SMMEs • Increased number of growing and sustainable SMMEs							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Strengthen the existing public awareness campaign and programmes supporting locally produced products.	A coherent and focussed public awareness campaign strategy in place.	i) The frequency, amount of space and airtime dedicated to public awareness campaigns on various media platforms.	**Key Agency:** **BITC** **Partners** MITI CEDA Business Botswana LEA SEZA BOBS BEMA		x			
		ii) Number of initiatives supporting locally produced goods.						

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 46	The implementation of the Leather Industry Park should be expedited.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicators	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Implement recommendations of the Leather Industry Park.	i) Livestock improvement schemes introduced. ii) Processing support programmes implemented. iii) Marketing initiatives implemented. iv) Skills and mentorship development programmes introduced.	Reports on the implementation of the recommendations of the Leather Industry Park.	**Key Agency: LEA** **Partners:** CEDA MoA BMC BITC Business Botswana		x			

Theme	Value Mapping and Analysis for Priority Sectors							
Objective	To promote regional and global manufacturing value chains							
Recommendation 47	Government should collaborate with the private sector to coordinate the development of skills required by manufacturing.							
Outcome	• To strengthen the competitiveness of the manufacturing SMMEs • Increase in market share, growth in output							
Activities	Output Indicators	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
i) Strengthen public-private sector partnership in the development of manufacturing SMMEs skills.	Manufacturing SMMEs skills development programme introduced in partnership with the private sector.	Number of graduates with skills relevant for the industry.	**Key Agency**: **MoTE** **Partners:** HRDC BQA BITRI Tertiary institutions Business Botswana		x	x		
ii) Remodel existing vocational training institutions to cater for manufacturing priority sectors.	Vocational Training Centres remodelled and operational	i) Improved technical skills. ii) Increased participation by SMME in the manufacturing priority sectors.						

Theme	Diamond Manufacturing Infrastructure							
Objective	To promote diamond beneficiation							
Recommendation 48	Government should expedite the establishment of the diamond training school in order to improve the skills of nationals on diamond polishing and cutting as well as jewellery making.							
Outcome	• To increase the contribution of diamond beneficiation in the GDP							
Activities	Output Indicator	Performance Indicator	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Establish a diamond training school.	The diamond training school established.	Number of students enrolled in the diamond training school.	**Key Agency: Diamond Hub** **Partners:** MoTE Botswana Chamber of Mines Debswana Lucara Business Botswana CEDA HRDC LEA BQA		x			

Theme	Diamond Manufacturing Infrastructure							
Objective	To promote diamond beneficiation							
Recommendation 49	Government should develop technical infrastructure such as laboratories and certification facilities to promote diamond beneficiation.							
Outcome	• To increase the contribution of diamond beneficiation in the GDP							
Activities	Output Indicator	Performance Indicators	Responsible Institution	Time Frame				
				2020/21	2021/22	2022/23	2023/24	2024/25
Technical infrastructure developed for the promotion of diamond beneficiation.	Laboratories and certification facilities for the diamond sector developed.	i) Number of laboratories and certification facilities. ii) Number of firms using the labs and certification facilities.	**Key Agency: Diamond Hub** **Partners:** MoTE Botswana Chamber of Mines Debswana Lucara Business Botswana CEDA HRDC LEA BQA BOBS		x			

Endnotes

1 Administrative data is the data that organisations collect about their operations. It includes data for routine operations, and is frequently used to assess how well an organization is achieving its intended goals (Chapin Hall at the University of Chicago https://www.chapinhall.org/research/what-is-administrative-data/).

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