



PROSPECTS FOR INDUSTRIAL TRANSFORMATION IN SADC

Towards a Regional Strategy and Roadmap

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INTRODUCTION

Heads of State and Government of the Southern African Development Community (SADC) met at Victoria Falls, Zimbabwe in August 2014 for their 34th Summit and agreed on the need for a strategy and roadmap on industrialization. After deliberating on the Summit theme -- “SADC Strategy for Economic Transformation: Leveraging the Region’s Diverse Resources for Sustainable Economic and Social Development through Beneficiation and Value Addition” -- they mandated the Ministerial Task Force on Regional Economic Integration comprising Ministers responsible for Trade and Industry, Finance, Economic Planning and Infrastructure Development to meet in early 2015 and draft an industrialization strategy and roadmap, supported by a technical team.

The Victoria Falls Summit also considered the draft Revised Regional Indicative Strategic Development Plan (RISDP) 2015-2020 and requested the Committee of Ministers of Trade, assisted by the Secretariat, to review Priority A in the document, particularly the sequencing of targeted outputs on Industrial Development and Trade Liberalisation in order to ensure that, “at the current stage of integration in SADC, industrialization is prioritized”.

These Summit decisions gave prominence to industrialization, and injected the much-needed energy and focus on Value Addition and Beneficiation of SADC’s raw materials. In order to implement the Summit decisions, the SADC Secretariat worked with a team of experts to support Member States in developing a practical, effective, and implementable strategy and roadmap for industrialization in the region. The strategy and roadmap should assist SADC to accelerate its pace of industrialization.

The importance of industrialization was acknowledged by the SADC leaders as far back as 2003, when they first adopted the RISDP (2003-2018), which advocated for the diversification of the industrial structure and exports with more emphasis on value addition across all sectors by 2015. The SADC Protocol on Trade recognises the importance of industrialization in the context of the implementation of the SADC Free Trade Area (FTA). Article 4(2) of the SADC Protocol on Trade states that the elimination of import duties under the SADC FTA “should be accompanied by an industrialization strategy to improve the competitiveness of Member States”.

Given the importance attached to industrialization, a number of initiatives have been put in place at the regional level over the years. The most comprehensive initiative was the SADC Industrial Upgrading and Modernization Programme adopted in 2009 in order to implement the RISDP component on industrialisation. Further, the SADC Industrial Development Policy Framework was adopted in 2012, seeking to strengthen cooperation and facilitate the development of backward and forward linkages or synergies across SADC industrial sectors – gradually building a diversified, innovative and globally competitive industrial base across the region.

As the chair of SADC between August 2014 and August 2015, the Government of Zimbabwe decided to take an active role in advancing the development of an industrialization strategy and roadmap, as agreed at the 34th Summit. The Southern African Research and Documentation Centre (SARDC) through its Regional Economic Development Institute (REDI), supported the Government of Zimbabwe in this endeavour, providing technical support to the Ministry of Foreign Affairs and Ministry of Industry and Commerce in guiding the development of the SADC industrialization strategy framework.

This report is a compilation of some of the preparatory work that informed that process through a series of workshops and papers, and captures some of the analysis and research undertaken in this regard. It is placed in the public domain as a tool for implementation and awareness of the need for this new Industrialization Strategy and Roadmap, which was approved by an Extra-Ordinary Summit of SADC Heads of State and Government held in Harare, Zimbabwe in April 2015.

SARDC drew on its internal capacity and that of a wide network of regional experts to provide research support to the Zimbabwean Government and SADC through the valuable input of various researchers. The report offers signposts that can guide SADC Member States in their quest to develop industrial capacity.

The analysis focuses on five sectors that the researchers believe provide quick wins for the SADC region as it embarks on the journey towards industrialization. These are Agriculture; Manufacturing; Mining; Micro to Small and Medium Enterprises (MSMEs); and Financial Mechanisms. It also takes a critical look at the important nexus between Industrialization and Trade. The report concludes with recommendations on the way forward.

Thanks to the team of researchers comprising Rongai Chizema, Professor Godfrey Dzinomwa, Farai Zizhou, Leonard Chitongo and Richard Saizi, and to Joseph Ngwawi, Head of SARDC's Regional Economic Development Institute (REDI), who coordinated the research work and edited the manuscript. Thanks also to the SARDC Executive Director, Munetsi Madakufamba, who supported the process throughout, from conceptualizing the research support through ideas and informed analysis, and particularly for the work initiated by his June 2014 paper on this subject, "Prospects and Challenges of Industrial Development in Southern Africa". This report also benefited immensely from the input of various local and regional experts who participated in a review workshop in Harare or made online contributions.

The Royal Norwegian Government provided financial support through its embassy in Harare, and this is acknowledged with gratitude. Other outputs made possible through the Norwegian support were a series of four discussion papers, published separately as summary Policy Briefs dealing with proposed policy interventions in the selected economic sectors of Agriculture and Manufacturing; Mining; Trade and Industrialization; and Financial Mechanisms.

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ACRONYMS

3AID	African Agri-Business and Agro- industries Development Initiative
APCF	African Productive Capacity Facility
AEC	African Economic Community
AfDB	African Development Bank
AIDA	Accelerated Industrial Development of Africa
APCI	African Productive Capacity Initiative
ASEA	African Securities Exchange Association
ASM	Artisanal Smallscale Mining
AU	African Union
AUC	African Union Commission
CAADP	Comprehensive African Agriculture Development Programme
CEDA	Citizen Entrepreneurial Development Agency
CEE	Citizen Economic Empowerment
COMESA	Common Market for Eastern and Southern Africa
CSR	Corporate Social Responsibility
EAC	East African Community
EAD	Economics of Agricultural Development
ECOWAS	Economic Community for West African States
EI	Extractive Industry
EITI	Extractive Industries Transparency Initiative
ESAP	Economic Structural Adjustment Programme
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Area
GDP	Gross Domestic Product
GVC	Global Value Chains
ICT	Information Communication Technology
IFC	International Financial Corporation
IDDA	Industrial Development Decade for Africa
IMF	International Monetary Fund
ITC	International Trade Centre
IUMP	Industrial Upgrading and Modernisation Programme
LDCs	Least Developed Countries
LEA	Local Enterprise Authority
LPG	Liquid Petroleum Gas
MDGs	Millennium Development Goals
MSME	Micro, Small and Medium Enterprises
MTP	Medium Term Plan
MVA	Manufacturing Value Added
NDB	New Development Bank
NEPAD	New Economic Partnership for African Development
NTB	Non-Tariff Barrier
OAU	Organization of African Unity
ODA	Official Development Assistance
PAMUST	Pan African Minerals University of Science and Technology
PGMs	Platinum Group Minerals
PMPA	Pharmaceuticals Manufacturing Plan of Action
PPDF	Project Preparation and Development Facility
PPPs	Public Private Partnerships
RAP	Regional Agricultural Policy
RDF	Regional Development Fund

RECs	Regional Economic Communities
RISDP	Regional Indicative Strategic Development Plan
ROO	Rules of Origin
RoW	Rest of the World
RVC	Regional Value Chains
SACU	Southern African Customs Union
SADCC	Southern Africa Development Co-ordination Conference
SADC	Southern African Development Community
SAPP	Southern African Power Pool
SARDC	Southern African Research and Documentation Centre
SEZs	Special Economic Zones
SMEs	Small and Medium Enterprises
SMME	Small, Medium and Micro Enterprises
SSA	Sub-Saharan Africa
TFTA	Tripartite Free Trade Area
TNC	Transnational Corporation
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations Industrial Development Organization
WB	World Bank
WTO	World Trade Organisation
ZimASSET	Zimbabwe Agenda for Sustainable Socio-Economic Transformation
ZMDC	Zimbabwe Mining Development Corporation

1. CONTEXT SETTING

Regional integration is increasingly becoming an important avenue for development for the African continent in general and the southern African sub-region in particular. However, the same cannot be said in respect of the economic sphere where development approaches have been largely individualistic. Industrialization, a key component of the Regional Indicative Strategic Development Plan (RISDP), is the engine for economic and social transformation of any country or region. However, the main challenge has been lack of clear sector-specific strategies to move towards the set targets.

All developing countries that have successfully made the transition from low-income to middle- and high-income status have done so by relying on a strong manufacturing sector as the driver of an export-oriented growth economy. There is an inseparable correlation between industrial productive capacity, economic growth and the level of development. Industrial development is key in the process of structural change which is key in the process of economic development.

The fact that most of the Southern African Development Community (SADC) Member States remain among the poorest in the world, in spite of having an abundance of natural resources and recording positive economic growth rates in recent years, is a reflection of their low level of industrialization and their peripheral position in global manufacturing. “Even the current model of African development, entailing the integration of the many previously fragmented post-colonial polities into larger Regional Economic Communities (RECs) has mostly been for purposes of creating larger markets for trade, with little focus on the supply-side aspects such as investment in industrial capability and economic infrastructure. In fact, industrialization strategies have only been either mentioned in passing, or have merely existed on paper, with little having been done to radically transform most African states into globally competitive industrial hubs, for example in the manner that China has transformed itself in the last three decades” (Madakufamba 2014).

On the global front, the world trading regime has changed recently, with the industrialized nations promoting trade relations that seek to enhance market access, and strengthen geopolitical interests. For example, the Trans-Atlantic Trade Investment Partnership (TTIP) seeks to enhance trade and investment relations between the United States of America (USA) and the European Union (EU). Similarly, the Trans-Pacific Partnership (TPP) is a trade framework between the USA and 11 Asia Pacific countries (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam).

What is of significance in all these developments is that they have been driven by strong waves of well-developed intra-firm, intra-industry, intra-regional trade dynamics and linkages that have sustained, shaped and influenced both the direction and intensity of cross-border investments, capital mobility and industrialization within and among the referenced trading blocs. These industry and trade dynamics are the very basis for the development and sustainability of domestic, regional and global production value chains.

These developments have therefore, little material impact, directly on the trade and business relations between the EU and SADC, the USA and SADC, given the skewed terms of trade in manufactures between the region and these markets. If anything, any extra-territorial trade relations with the USA and EU will either be defined (at the moment) around the Africa Growth and Opportunity Act (AGOA) or the Economic Partnership Agreements (EPAs) discourse.

To the extent possible, for instance, in order for the EU to fulfil the grand emerging trading relations with the USA, there may be need for security of supply of natural resources/raw materials. Thus, current initiatives by SADC to industrialize may place a negotiating resource premium for the region, while also providing challenges.

1.1 Recent Trends and Initiatives for Industrialization in SADC

The region lags behind in industrial development and its exports remain confined to a dominance of semi-processed products, emphasising the significance of primary agriculture and extractive sectors (mining, timber, gas and oil, among others), in their national outputs. Though contribution to Gross Domestic Product (GDP) for these sectors remains significant, “value addition in these sectors remains low, on average remaining at 14 percent of GDP in 2009” (World Bank 2011). Consequently, this has not shielded these economies from vulnerability to cyclical terms of trade movements, as evidenced by the impact of the Global Economic Financial crisis of 2007 on the continent.

The motivation for the paper draws from the 34th SADC Summit that was held in Victoria Falls, Zimbabwe in August 2014. The major outcome/ resolution from that Summit was the need to frontload industrialization initiatives in the region, given the economic development realities on the ground. The Summit therefore requested that there be an interrogation of these challenges in order to inform the development of a SADC Industrialization Roadmap.

The challenge of a low industrial capacity has been correctly acknowledged in SADC Policy documents, and collectively the region needs to increase the manufacturing sector percentage share of GDP to levels above 25 percent as already identified in the RISDP in order to significantly transform the economic and social status of the majority of the citizens.

1.2 Building a Regional Industrialization Agenda Beyond the 34th SADC Summit

A key challenge for SADC as a region is to move off an economic growth path built on consumption and commodity exports onto a more sustainable development path based on industrialization (SADC 2012). Most countries in the sub-region are still in the early stages of industrialization, given the dominance of the agriculture sector and extractive industry referenced earlier.

In the SADC region, industrialization is guided by the SADC Industrial Development Policy Framework (2012), which provides for the following strategic thrusts:

- a) Improving standards, technical regulations and quality infrastructure;
- b) Promoting innovation, technology transfer, and research and development activities;
- c) Developing mechanisms for appropriate industrial financing;
- d) Integrating infrastructure and services into the regional industrialization strategy;
- e) Supporting small and medium-sized enterprises (SMEs);
- f) Attracting local and Foreign Direct Investment (FDI), promotion of exports, particularly targeting priority sectors;
- g) Developing regional strategies to exploit opportunities emerging in the region’s strategic cooperation with global partners, particularly South-South cooperation; and mainstreaming crosscutting issues and complementary policies into the regional industrialization strategy.

Though industrialization is covered under the Trade/Economic Liberalisation and Development component of the RISDP, not much progress has been registered in coordinating industrialization initiatives in the sub-region. “Though indicative in nature, RISDP has not lived up to its original purpose to deepen regional integration in SADC. In fact, on the ground, there is a complete absence of a Regional Industrialization Strategy” (Zimconsult 2011).

Institutional, legal and resource capacity-constraints remain major obstacles stalling fruition of industrialization initiatives. Non-Tariff Barriers (NTBs) and related obstacles to doing business in the region continue to hamper any meaningful prospects for industrial development in the medium to long term.

Though of note are milestones such as the SADC Industrial Upgrading and Modernisation Programme (IUMP) of 2009, and the SADC Industrial Development Policy Framework that prioritises the regional value chain approach to industrialization, not much ground has been covered. This aside, the SADC RISDP Review that posts a 2015-2020 tenure has re-prioritised programmes, with Priority A ascribed to the Trade/Economic Liberalisation and Development component.

This emphasises development of regional supply chains and value addition with the key deliverable being that of developing sector specific strategies for regional value-chain development. Priority focus is on (a) agro-food processing; (b) mineral beneficiation and pharmaceuticals; (c) improving technical regulations, and quality infrastructure; (d) developing a mechanism for industrial financing; (e) strategies for exploitation of industrial development opportunities, in cooperation with other regions of the world; and (f) enhancing capacity to formulate and implement national industrial policies and ensuring their synergy/cohesion.

Yet, besides the issue of industrial value chains raised above, regional economies have done little to create business operating environments that facilitate a broad-based and inclusive development agenda – one that maximizes the collective potential of its citizenry to meaningfully engage in formal productive and economic activities. This has led to economic dualism that manifests itself through the continuation of a narrow minority economy, the dual enclave economy.

1.3 The 34th SADC Summit in Perspective

The 34th SADC Summit held in Victoria Falls, Zimbabwe, in August 2014, was hosted under the theme:

“SADC Strategy for Economic Transformation: Leveraging the Region’s Diverse Resources for Sustainable Economic and Social Development through Beneficiation and Value Addition.”

This theme fully acknowledges the challenges the sub-region has encountered in its quest to industrialize, and thus seeks to reverse that unsustainable economic development scenario.

The theme, therefore, seeks to engender an industrial development path that aims to cushion regional economies from the challenges of vulnerability to global shifts in terms of trade for commodity prices that were confirmed by the negative effects of the Global Financial Economic Crisis of 2009. The vulnerability of SADC economies to the global economy was harshly exposed during the global financial crisis in 2009 which later developed into a fully blown global economic crisis in 2009 (Madakufamba 2014).



Countries in the region have been developing strategies and policies to drive their economic development programmes, and of note in this regard is South Africa's latest annual Industrial Policy Action Plan of 2014. Namibia also addresses issues of industrialization in its rolling annual National Development Plan. Botswana's Economic Diversification Drive: Medium to Long Term Strategy 2011-2016 seeks to facilitate the same industrialization initiatives.

In the case of Zimbabwe, the government introduced its economic agenda, the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimASSET) which places emphasis on beneficiation and value addition to local resources to enhance the revenue streams from the country's diverse and abundant natural resource endowment. ZimASSET is a foundation for social and economic transformation of the Zimbabwean populace, so as to drive the country towards a sustainable human development path in the medium-to-long-term.

Many countries in the SADC region suffer from a resource paradox in which the vast resource base and the acute poverty levels cannot be reconciled – e.g. Angola (oil, gas and minerals), Zimbabwe (minerals), DR Congo (minerals), Zambia (minerals), Tanzania (minerals and natural gas), and Mozambique (minerals, and natural gas). This paradox can only be reversed through economic transformation, as illustrated in the choice of the theme for the 34th SADC Summit.

Lin (2010) argues that a developing country can change its industrial and economic structure by changing its endowment structure consisting of its factor endowments (land/natural resources, labour and physical and human capital) and its infrastructure endowments, both hard/tangible infrastructure and soft/intangible infrastructure (institutions, regulations, social, social capital, value systems etc.) Thus, the SADC region stands to benefit significantly from pursuing an industrialization development strategy that leverages the vast and diverse resource base (natural/land resource and reserve pool of labour) with adequate investment in both soft and hard infrastructure.

According to Jourdan (2012), this could be achieved through deepening of the resources sector (natural) through upstream and downstream (infrastructure) industrial linkages that then form the core industrialization nuclei for regional economies. The author further observes that these economies will over time diversify with increasing human resource development, technology development and skills formation through the lateral migration of these resource development industrial clusters into resource independent industrial activities.

This description fits the aspirations of the SADC theme that guided the deliberations of the 34th Summit and thus challenges the region to optimally exploit its comparative advantage to transform that into a competitive advantage.

2. METHODOLOGY

The Paper required both Primary and Secondary data in order to adequately address the Terms of Reference (TOR). However, the timeframe and resources for the project did not provide enough scope for this to be done. The findings and hence recommendations are thus based largely on the analysis of Secondary data, collected mostly from National Governments, SADC Secretariat, and African Union (AU) as well as publications from international organisations such as the World Bank (WB), United Nations Industrial Development Organisation (UNIDO), United Nations Economic Commission for Africa (UNECA), and United Nations Centre on Trade and Development (UNCTAD). The findings were mostly generated through desk research given the limited timeframe.

This paper had a review process by technical experts and government officials, with the objective of supporting the development of a regional policy on industrialization and feeding into the regional deliberations leading to the SADC Extra Ordinary Summit in April 2015 that approved the SADC Industrialization Strategy and Roadmap.

The focus on the three sectors of **Agriculture, Manufacturing, and Mining** is premised on the significance that these sectors command in regional production economics, and hence industrialization, while the focus on Micro, Small and Medium-scale Enterprises (MSMEs) is on account of the sector's contribution to national output in respective SADC Member States. In development economics, these three sectors have also had a significant role in the economic structural transformation thesis. Therefore, the research could have also covered other sectors for a more comprehensive picture.

2.1 Presentation of the Paper

The presentation of the paper is divided into sections that cover the sectors prioritised as providing a better understanding of the dynamics of economic structural transformation, and industrialization. An attempt has been made to group related subjects and hence maintain a flow.

Section 4 on *Sectoral Dimensions to Industrialization in SADC* provides information on how the sectors chosen provide opportunities for industrialization in the SADC region.

Section 5, *Industrialization and Trade Nexus*, provides the linkage between industrialization and trade in the context of regional economic integration in the SADC.

Section 6 focuses on *Institutional Support and Financing Mechanisms to Support Industrialization*, while Section 7 on *Mapping an Indicative SADC Industrialization Roadmap* provides some concluding points on the possible timelines and actions.

3. THE ECONOMIC STRUCTURE OF SADC

The SADC region is not made up of a homogeneous group of countries, and in fact “...comprises one dominant economy (South Africa) and several other smaller economies that are at different levels of development” (Madakufamba 2014).

“However, the most populous are not the largest in terms of GDP, as in the cases of DR Congo and Tanzania with the largest population but the poorest countries. Botswana, Mauritius, Seychelles and South Africa are the middle income countries, with the highest GDP per capita of the region” (Innovos 2014). As the largest economy in Africa, South Africa dominates, with 65 percent of the region’s GDP (Innovos 2014).

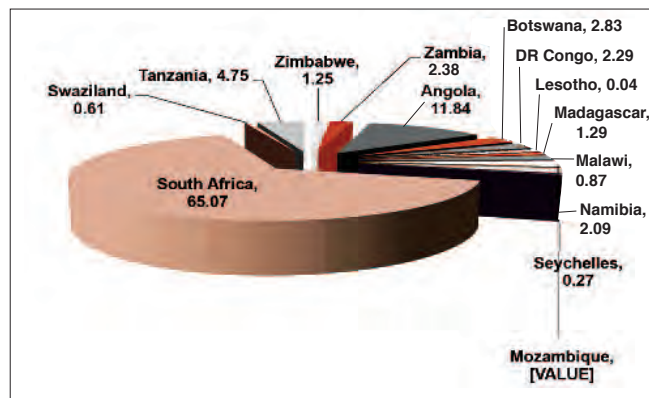
Table 1 and Figure 1 provide the population and GDP profiles for the SADC region.

Table 1 SADC Population Profile and GDP Proportions, 2013

Country	Population (000)	% of SADC Population	% of SADC GDP
Angola	20 820.5	7.29	1.84
Botswana	2 003.9	0.7	2.83
DR Congo	65 705.1	23.0	2.29
Lesotho	2 051.5	0.72	0.04
Madagascar	22 293.9	7.81	1.29
Malawi	15 906.5	5.57	0.87
Mauritius	1 291.5	0.45	1.84
Mozambique	25 203.4	8.82	2.23
Namibia	2 259.4	0.79	2.09
Seychelles	87.9	0.03	0.27
South Africa	51 189.3	17.92	65.07
Swaziland	1 231.0	0.43	0.61
Tanzania	47 783.1	16.73	4.75
Zambia	14 075.1	4.93	2.38
Zimbabwe	13 724.3	4.8	1.25

Innovos Group 2014

Fig 1 % of SADC GDP, 2012



However, the attendant lack of industrialization and employment opportunities in the rest of the SADC countries has a negative bearing on long-term stability of South Africa, as it results in an influx of illegal immigrants. Table 2 shows that the region has a vast resource in its youthful population of below 35 years of age that accounts for 75 percent of the total population, implying a huge reserve of untapped labour force, particularly given the high unemployment rates.

Table 2 SADC Regional Socio-Economic Indicators

Socio-Economic Indicator	Statistic
Population	292,048 million
Life Expectancy	50 years
Population under 35 years	75%
Human Development Index (Value)	0.338-0.771
Adult Literacy	52.5%-94.9%
Unemployment Rate	8.0 – 29.6% (2013)
Real Gross Domestic Growth Rate	5.2% (2014 est)
Inflation Rate	5.6% (2014 est)
HIV/AIDS	0.4-27.4% of Population Age (15-49 Years)

SADC Regional Vulnerability & Assessment Synthesis Report 2014

¹ Human Development Index (HDI) is a composite score of life expectancy, education and income indicators, where 1.0 represents the highest score.

This scenario creates challenges for charting the course of a sustainable industrialization and regional integration agenda, hence the need for an approach that recognizes the apparent realities of this disproportionate economic development structure of the region. It also creates opportunities for disproportionate distribution of the gains from trade and economic development, hence the need to encourage equity in regional development programmes.

Most SADC countries exhibit strong primary commodity export dependency, as a result of their poorly diversified production (Bank of Angola, 2012). Exports are limited to a small range of products and intra-SADC trade is dominated by food items, with most nations relying heavily on South African imports. The challenge for SADC Member States, therefore, is to focus more on industrial diversification to create a firm basis for increasing intra-SADC trade.

“South Africa has also become the largest foreign investor in southern Africa by taking advantage of its relative competitive advantages comprising of, among other things, abundant investible capital. ...The country has used the global push for economic liberalization and deregulation to exploit business opportunities in Africa” (Trades Centre, 2010). South African direct investment in the SADC Member States exceeded US\$5.4 billion by 2000 (Games, 2003).

Africa’s industrialization and trade in processed products, including the SADC region, will depend on increased value addition in two sectors – agriculture and mining. These two sectors possess strong growth linkages and multiplier effects of growth. Of note is the fact that “industrialization is a process of structural change whereby a country or region strives to become a technological leader, creating wealth and dominating trade in manufacturers” (UNECA, 2013).

Industrialization is the period of social and economic change that transforms a human group from an agrarian society into an industrial one, involving the extensive re-organisation of an economy for the purpose of manufacturing. As incomes rise for industrial workers, the markets for consumer goods and services of all kinds tend to expand and provide a further stimulus to industrial investment and economic growth.

Beyond this, the economy advances towards diversification, innovation, less reliance on imports, and investments (Rostow, 1960). This development trajectory has been experienced by China and the Asian Tigers (Japan, Singapore and Thailand) at the height of their economic structural transformation.

This situation is characterized by a sustained expansion of the economic development frontier, supported by factory production, division of labour, and concentration of industries. The SADC region is still a long way from drawing such an economic development trajectory, with limited transformation in the period since political independence.

The region has failed to exploit the huge locational advantage of producing crude resources to establish resource-processing industries that could provide the feedstocks for manufacturing and industrialization (UNECA, 2013). Paul Jourdan (2013) emphasised in this regard that “the resource contracts or licences need to provide incentives or disincentives for mineral resources downstream beneficiation.”

Zimbabwe has taken a bold step towards this approach with the 2014 National Budget presenting these policy initiatives to unlock meaningful value and returns from the mining sector. These measures include the provision of a two-year window to platinum producers expiring at the end of 2014 to invest in platinum refinery facilities, beyond which any failure to comply would result in a ban on raw mineral exports. “Government will introduce some tax disincentives on the export of raw platinum, including other minerals” (National Budget, 2014). All exports of unrefined gold were also banned to encourage value addition and beneficiation.

The 34th SADC Summit mandated the Ministerial Task Force on Regional Economic Integration, comprising of ministers responsible for Trade, Finance, Economic Planning and Infrastructure Development, to meet by February 2015, supported by a technical team, and agree on a Strategy and Roadmap for Industrialization of the region.



The 34th Summit also considered the draft Revised RISDP 2015-2020 and endorsed the decision by Council of Ministers that requested the Committee of Ministers of Trade, assisted by the SADC Secretariat, to review Priority A on “Industrial Development and Trade Liberalisation” to ensure the sequencing of the targeted outputs. The objective was to ensure that, “at the current stage of integration in SADC, industrialization is prioritised.”

As the SADC Chair, Zimbabwe was expected to take a leading role in the development of the Industrialization Strategy and Roadmap, for discussion during an Extra Ordinary SADC Summit set for the first half of 2015, which took place in April in Zimbabwe.

3.1 Mainstreaming Gender in Industrialization

The revised RISDP states that the overall goal of the Gender Equality and Development intervention area is to facilitate the empowerment of women and gender equality, and the promotion of gender-responsive, human-centred development towards inclusion and social justice. The draft further highlights that the key areas of focus include policy development and harmonisation of regional and national frameworks, economic empowerment, and gender-based violence.

“SADC recognizes gender equality as a fundamental human right and an integral part of regional integration, economic growth and social development, and therefore, is committed to facilitating the removal of all forms of gender inequalities at the regional and national levels. Despite efforts made by SADC Member States to empower women and attain gender equality in line with the commitments, gender inequities still persist. Women and girls still face challenges in accessing legal rights, education, health and economic resources, among others” (Draft Revised RISDP, 2014).

What is key for the SADC region as it repositions the RISDP is to comprehensively mainstream gender issues beyond the focus on addressing inequalities that have marginalised women. The need to capture both men and women in light of their roles (productive and reproductive, and in the community), while also paying attention to gender relations, cannot be overemphasised to ensure development of a gender-sensitive industrialization strategy for the region.

Box 1

Mainstreaming Gender into Industrialization

1. **Critically examine** the roles of both men and women and the relations between them, their differential access to and control over resources and different needs.
2. **Recognition of the fact that** the lives of both men and women are multi-dimensional and have to be perceived and addressed as such in policy and planning terms. Thus, for example, instead of addressing women or men in a uni-dimensional fashion – as workers or producers alone, a gender approach would take into account their multiple roles in the household, the workplace and society.
3. **Appreciation that** there is an increasing diversity of household types with women-headed or woman-maintained households emerging as an important growing household form (Buvinic and Gupta, 1993).

Beal, J. and Davial, J.D., 1994

It therefore, follows that mainstreaming gender into industrialization policy should be informed by an analysis of the opportunities and constraints faced by women and men in the context of these strategies for industrialization, in particular the way in which they may not meet gender needs. It is important to observe from the onset, that “...the impact of industrialization can also be different for women and men, and affect their wellbeing generally” (Beall and Davila, 1994). A benchmark analytical framework for a gender-sensitive industrialization strategy for the SADC region could be guided by the three considerations shown in Box 1.

The planning and execution of industrial policies nationally and regionally within the SADC context should fuse the elements noted in Box 1 to maximize developmental aspirations and outcomes and entrench a sustainable human development path that ensures a broad-based developmental framework to reduce poverty in the region. Therefore, it remains crucial to fully “...recognize the interaction between the organisation of work and other social relationships and responsibilities (of men and women) to guide the development of sustainable strategies towards promoting productivity and reducing poverty” (Beall and Davila, 1994).

4. SECTORAL DIMENSIONS TO INDUSTRIALIZATION IN SADC

4.1 Agricultural Sector Transformation A Building Block for SADC Industrialization Roadmap

According to the SADC Regional Agricultural Policy² 2013 (RAP), the sector remains central to poverty reduction, growth, food and nutrition security, accounting for the livelihoods, employment income and wealth creation for 66 percent of the region's population of more than 280 million (2011). The policy further notes that the agriculture sector contributes eight percent of the region's GDP, rising to 28 percent when all medium-income countries are excluded. Annex 1 to this document provides information on the available arable land and land use in agriculture, as well as the population deriving benefit from the sector.

The sector has been growing at an annual rate of 2.6 percent against a population growth rate of 2.5 percent during the 10-year period to 2012 on account of expanded cereals production, which recorded a 46 percent growth owing to a 40 percent increase in maize production (RAP, 2013). Cassava production has more than doubled in the last 20 years. Livestock production has increased by on average three percent per annum, while at the same time forestry and fisheries have also trended upwards.

Despite these positive production trends, the region remains a net importer of food-stuffs and malnutrition levels are still high, with vulnerabilities to variable climatic conditions remaining a challenge. The RAP notes that intra-regional trade in agriculture remains subdued at 10 percent in comparison to other regions such as the Association of Southeast Asian Nations (ASEAN) where this sector records 30 percent. Some of the challenges include low labour productivity, low land productivity, weak market linkages, and low cereals yields.

4.1.1 The Need for Structural Transformation in the Sector

The region has continued to lag behind in industrial development and its exports remain confined to a dominance of unfinished or semi-processed products, emphasizing the significance of the primary agriculture and extractive sectors (mining, timber, etc.) in their national outputs. Though contribution to GDP for these sectors remains significant, "value addition in these sectors remains low, on average remaining at 14 percent of GDP in 2009" (World Bank, 2011).

Consequently, this has not shielded these economies from vulnerability to cyclical terms of trade movements, as evidenced by the impact of the global financial crisis of 2007 on the continent. Africa's long-term food security requires a transformation of the continent's agriculture, diversifying and orienting it towards markets as well as scaling up investments and innovation for its sustainability (UNECA, 2014). For any meaningful contribution of agriculture to sustainable human development, an integrated approach is needed that targets policies and interventions to structurally transform the sector while at the same time fostering rural development to equitably distribute the gains of such a process.

² The RAP takes account of all continental frameworks on the sector, i.e. African Union, New Partnership for Africa's Development (NEPAD), Comprehensive African Agriculture Development Programme (CAADP) and the Millennium Development Goals (MDGs).

Tapping from Experiences Elsewhere

State of India. “Punjab, during the 1960s, achieved remarkable growth, and is now the richest state of India. This growth and prosperity is primarily the result of Punjab’s adoption of new technology in agriculture. The rapid growth of agriculture has had a large impact on the rest of the economy, especially the agro-industries that supply both current and capital inputs, and that process agricultural produce. The emergence of large surpluses in agriculture stimulated an unprecedented increase in trade and transport. By raising the income of a large proportion of rural workers, rapid agricultural growth not only made a deep dent in rural property but also led to development in other sectors” (Balla, 1995).

Republic of China. “Indeed the Republic of China made a point of fostering a close and mutually complementary relationship between agriculture and industry. It developed a policy of building up industry through agriculture, and using agriculture to develop industry, in order to obtain a balanced development of both. The first step in developing agriculture was to institute land reform. Public lands were released for farming, and a project launched for transferring land to the tiller. Agricultural production was also boosted by introducing labour intensive industries, and refine farming, coupled with innovative technologies and infusions of capital” (Mellor, 1995).

Mauritius is a country in the SADC region which was able to successfully deploy earnings from a thriving sugar production scenario to a highly mechanised industrial sector. To date, it stands as a regional and global player in the textile and garment sector. The economy is now diversified, despite narrow resource endowments.

Norway’s Experience. “The industrialization process in Norway started with agriculture. Following modernization and mechanization of the agricultural sector, an increasing part of the rural population moved to the cities. Cities grew, trade started and an increasing work force was made available for emerging industries, primarily based on natural resources or economic activities where Norway had a comparative advantage or already a tradition. ...But, however important agriculture is for a vast number of reasons, and also as a foundation for food processing industries, I think it is fair to say that agriculture alone will not get you rich. Only manufacturing can do that. And the manufacturing sector really solved three policy problems for Norway in one go when it was established. It increased considerably the national value addition (and GDP), it increased employment, and solved our balance of payment problems” (H.E. Bard Hopland, Ambassador of Norway to Zimbabwe, 2015).

The process will, of consequence, trigger backward and forward linkages between the agricultural sector and other key sectors such as manufacturing, and mining, thereby unleashing significant growth potential for the economy as a whole.

It is, therefore, quite apparent that agriculture wields great potential to drive economic development, especially since most countries in the sub-region are still in the early stages of industrialization. This is because agriculture possesses strong growth linkages and multiple effects of agricultural growth to the non-agricultural sectors (Johnston and Mellor, 1961). Furthermore, the sheer size of the agricultural sector with its attendant role in creating employment for over two-thirds of the population of most SADC countries should make agriculture the leading sector for economic transformation (UNECA, 2013).

Mellor (1966) in the *Economics of Agricultural Development* traces the transformation debate in the agricultural sector as it progresses beyond being a traditional sector to specialised production. Mellor captures the positive relationship between agricultural growth and corresponding structural transformation of any economy, confirming that agriculture has the potential for positive impact on the growth of an economy.

What emerges from this debate is that depending on the economic context, the agricultural sector can play a major role in the development process. This will, to a large extent, also depend on how the agricultural sector integrates with the rest of the economy during the transformation process. A developed agricultural sector will trigger significant multiplier effects through backward and forward linkages with the industrial sector by providing inputs (agricultural produce) for manufactures, while the latter supplies key inputs such as fertilizers and farm implements. The case of the Punjab State in India presented in Box 2 fits into this type of relationship.

The transformation of the agricultural sector has a direct impact on both consumption and production linkages between the sector and other non-agricultural sectors such as manufacturing and services. The strongest backward linkages are the consumption linkages, which are especially strong in low-income countries, leading to higher growth and multipliers and poverty reduction effects (Delgado et al, 1996; Christiaensen et al, 2006; Diao et al, 2007).

In the case of China, agriculture made three major contributions to development (Mellor, 1995):

- it satisfied the increased demand for agricultural products created by rapid growth of both the economy and the population, which stabilized commodity prices and wages;
- it provided the labour that the industrial sector needed to proceed with economic development; and,
- it provided the capital needed for industrialization.

The accelerated socio-economic development in China is generally regarded to have its historical foundation in agricultural sector reforms, with poverty reduction an important goal of national development.³ Of importance is the manner in which China has managed to study and understand the key inhibiting factors to agricultural production; the region-wide economic, ecological and socio-cultural differences; and the corresponding policy decisions to adopt region-specific interventions which were all placed at the centre of government financing and/or support (Vhumbunu, 2013).

Agriculture thus transformed rural development and reduced poverty, lifting more than 200 million people out of rural poverty between 1978 and 2009, and in 2012 alone, a total of 23 million people were lifted out of poverty (*China Daily*, 2013). Despite these achievements, China's poverty reduction efforts still face the challenges of unfavourable ecological conditions and socio-cultural barriers.

Despite these debates on the net benefits of economic transformation, much of Africa, including the southern African region, has not fully benefitted from its agricultural potential.

4.1.2 Factors Inhibiting the Industrialization of Agriculture

The agricultural sector has been fraught with challenges that have constrained its ability to contribute meaningfully to industrialization and provide sustainable income earnings for beneficiary regional economies. These are documented under Box 3.

4.1.3 Maximising Agriculture's Contribution to Industrialization in SADC

The African Union, UNECA, and UNIDO continue to dedicate efforts towards addressing the industrialization challenges of the continent, particularly the need to shift the production function from a dominance of commodities/extractive goods towards a higher value chain production base. In this regard, initiatives such as the African Productive Capacity Initiative (APCI), which was endorsed by the Heads of State and Government in 2004, and the African Productive Capacity Facility (APCF) have been developed.

The Vision of the APCI is to build the productive capabilities of the African economies to be able to produce tradable goods. According to the AU (2014), the entire approach is premised on:

- Building an African Common Vision of productive capacity based on an integrated regional value chain;
- High sectoral priorities as part of specific segments of the value chain based on comparative and competitive advantage, economies of complementarity and economies of scale;
- Harmonising industrial policies/strategies at the national/regional levels based on cooperation/collaboration, with involvement of RECs; and,
- Identifying sub-regional programmes for productive capacity upgrading backed by a financial facility – the APCF.

Box 3

Factors Constraining the Regional Agricultural Industrial Potential

- Low labour productivity
- Low land productivity
- Weak market linkages
- Low cereal yields
- Limited capacity to absorb technology
- Weak research and development capacity to expand innovation frontiers
- Limited mechanisation
- Limited financial inclusion which weakens access to credit and capital
- Infrastructure bottlenecks constraining farmers' access to markets
- Weak land tenure and regulatory frameworks to facilitate investment and capital accumulation.

³ President Xi Jinping's statement (in his capacity as a Party Chief then) during his official tour of poverty stricken communities in Fuping County in Hebei Province. He echoed the same sentiments during a similar tour of communities in Gansu Province, North West China. *China Daily* online newspaper, 28 February 2013. "Xi Jinping Calls for Poverty Alleviation" <http://www.chinadaily.com.cn/china/2013> Accessed 13 May 2013

Objectives of 3ADI

Support an investment programme that will significantly increase the proportion of agricultural produce in Africa that is transformed into differentiated high value products, such that by 2020 more than 50 percent of Africa's food products sold in local and national markets are in the processed form and that the proportion of Africa's agricultural exports that are processed into final consumer products more than doubles, fully meeting food safety standards demanded by consumers in the continent and in the global market place.

Key Algiers Recommendations to the African Union Commission

Encourage the creation of regional lines of credit and other forms of financial facilities, such as guarantees, to finance the establishment of regional value chains in selected sectors of strategic importance for Africa.

Africa's transformation is to be carved on commodity-based industrialization through: agro-industries; agri-business; and development of integrated regional value chains.

Apart from this, the overarching initiative is that of the Accelerated Industrial Development of Africa (AIDA) of 2009. Under this initiative, and following the 2011 Algiers meeting of Ministers of Industry (CAM 19), three sectoral initiatives were developed:

- ◆ The African Agri-Business and Agro-Industries Development Initiative (3ADI);
- ◆ The African Mining Vision; and,
- ◆ The Business Plan for Pharmaceuticals Manufacturing Plan of Action (PMPA).

The 3ADI is, therefore, a major guiding signpost for both the structural transformation of agriculture in Africa and the respective RECs, and hence a key cog towards unleashing the sector's potential in the continent's industrialization agenda. It should therefore provide a compass or reference point for structuring any meaningful programme to develop agriculture, as shown in Box 4 which details both its objectives and recommendations of the Ministers at their Algiers meeting.

4.1.4 Specific Actions Required to Industrialize in the SADC Context

Given the above background, what is key for the SADC region is to do an introspection to gauge how far we are from these landmark targets, and what needs to be done to close the identified gaps. Before the region charts and develops an appropriate roadmap for industrialization, it needs to take stock of those factors that may inhibit the sector's capabilities. Any meaningful roadmap should therefore, address the following factors.

- Concentration of agricultural markets in the hands of a few players who control the entire chain from inputs to production, and to markets. This weakens the bargaining capacity of smallholder farmers, a major player in the transformation of the agriculture sector. There is need to reverse this untenable market scenario.
- Inequitable distribution of the means of production including land. Taking a cue from the Chinese example, land tenure-related challenges were addressed through a Land Reform programme.
- Address agriculture infrastructure needs such as roads to enhance access to markets. Irrigation infrastructure, as well as its rehabilitation.
- An objective assessment of regional agricultural commodity value chains, to form the basis for targeted development of specific production chains on the basis of both competitive and comparative advantage. For example, Zimbabwe has been highly recognised for the production of good cotton.
- Addressing climate change and attendant vulnerabilities.
- Land use dynamics and factors influencing them.

- Access to domestic credit to finance production.
- Access to training to enhance skills for productivity improvement.
- Research and development and access to productivity enhancing technology. Institutions that provide specific technical support to the sector include universities, specialised colleges, public/private training centres. In some cases these require additional funding to upgrade their capacity, while in some cases there is need for new investment.
- Extension services and market linkages.

4.1.5 Specific Policy Considerations for the Sector

- ✦ Equitable distribution of the means of production (land resources, capital etc.).
- ✦ Support to smallholder agricultural production models, e.g. the Chinese agrarian reforms and benefits thereof can be a benchmark.
- ✦ Agriculture-related infrastructure investments such as dams, irrigation, feeder road networks to enhance access to markets.
- ✦ Development of regional commodity value chains to guide development of specific regional agro-production chains.
- ✦ Addressing climate change vulnerabilities.
- ✦ Research and development to enhance absorption of new production technologies and innovation.

4.2 Manufacturing Sector and Prospects for Industrialization in SADC

The share of manufacturing in GDP in Africa rose from a low level of 6.3 percent in 1970 to a peak of 15.3 percent in 1990, and has since fallen to 12.8 percent in 2000 and 10.5 percent in 2008, according to UNIDO statistics (2010).

SADC ranks relatively well among other regions in Africa but quite low compared to other regions of the world in terms of industrialization. “The region characterises developing economy status – large share of GDP is from primary sectors, mainly agriculture and mining. Contribution to GDP for these sectors is still very high. With the exception of Mauritius and South Africa, which have sizable manufacturing sectors, the SADC industrial sector remains relatively undiversified” (SADC Industrial Development Framework, 2012:9).

However, value addition in these sectors remains low, averaging 14 percent of GDP in 2009 (WB, 2011). Only two of the 15 SADC Member States have the Manufacturing Value Added (MVA) as a proportion of total GDP above 20 percent. Annex 3 illustrates this situation.

The Zimbabwean economy continues to grapple with the structural challenges of a dualist economy inherited at independence, which has remained intact and been worsened by neo-liberal policies such as the Economic Structural Adjustment Programme (ESAP, 1991-1995). The industrial capacity utilisation in Zimbabwe’s manufacturing sector has declined to current levels of 39.6 percent, hence confirming a de-industrialization phase that set in from 2000 onwards. Any meaningful industrialization agenda in the Zimbabwean context, and applicable also to some other SADC Member States, is to address these structural challenges in the initial stages of the industrialization process.

In all SADC Member States, the manufacturing sector’s contribution to GDP is less than 20 percent, and in some cases less than 5 percent (SADC, 2012:9). Regional economies should, therefore, pursue strategies that facilitate diversification of pro-



duction as part of a structural transformation agenda, as a building platform for establishing a sustainable industrial growth path in the medium to long term. Industrial intensity is fairly low, with industrial output heavily concentrated on low technology products, such as food, beverages, textiles, clothing and footwear (SADC, 2012:10).

“SADC manufacturing value added as a percentage of GDP has collapsed by 34.7 percent -- from an average of 17.6 percent during the period 1981-1989 to 11.5 percent in 2013. This contraction becomes more pronounced from 1990 onwards, from a level of 20.5 percent, declining sharply to 14.9 percent in 2002 to the 2013 position of 11.5 percent.”⁴

This trajectory posits a gloomy picture for any meaningful expansion in manufacturing to enhance the region’s industrialization prospects, unless significant policy interventions are deployed nationally and regionally. This is symptomatic of a high proportion of de-industrialization for the region during the 33-year period from 1980 to 2013.

4.2.1 Factors Constraining the Optimal Contribution of Manufacturing Sector to Industrial Growth

“To achieve economic transformation, African countries need to graduate from being mainly exporters of natural resources and raw materials. They need to industrialize and place particular attention on adding and retaining value within the continent” (UNECA, 2013:1). What currently stalls this structural transformation is the limited coherence in industrial policies across member states that have limited adaptation or flexibility to allow room for response to the changing global production and trading system. This structural shift in production will entail, among other strategic initiatives, deliberate efforts to shift gear from low value production towards **value addition and beneficiation**.

Industrialization is a global process of structural change whereby a country or region strives to become a technological leader, creating wealth and dominating trade in manufacturers (UNECA, 2013). Thus, an industrial-led development path consists of a process of reallocating factors of production from an agricultural sector characterized by low productivity and rudimentary technology to a modern industrial sector with higher productivity (Adelman, 1999; Szirmai, 2011).

This scenario still has to fully manifest itself in the SADC region as shown in Table 3 and Box 5, confirming that although the regional economies have transformed structurally, this has varied across countries, while remaining generally unsatisfactory.

The challenge of a low industrial capacity has been correctly acknowledged in SADC policy documents and collectively the region needs to increase the manufacturing sector share of GDP to levels above 25 percent as already identified in the RISDP in order to significantly transform economic and social status of the ma-

Table 3 Industrial Value Added for SADC Member States (% annual growth)

	1960 – 1980	1981-2000	After 2001
Angola	-	4	10
Botswana	24	9	2
DRC	3	-4	7
Lesotho	9	7	6
Madagascar	0	1	4
Malawi	6	3	6
Mauritius	2	7	2
Mozambique	-	6	10
Namibia	-	1	-1
Seychelles	14	8	4
South Africa	4	1	2
Swaziland	7	9	1
Tanzania	-	3	9
Zambia	2	-1	8
Zimbabwe	2	2	-2
SADC Average	7	4	5

UNECA 2012

⁴Proportions calculated using data featured under the <http://knoema.com/AfDBSED2014Jan/afdb-socio-economic-database-jan-2014?tsId=1628670> site.

Box 5

The SADC Structural Transformation Scenario 1980- 2010

The pace of transformation has been very slow compared to other developing countries in other regions such as Brazil, South Korea and Malaysia. Even more disturbing is the observation that the SADC region was virtually at a standstill between 1980 and 1990, with no change in its industrial structure during that decade. There were slight improvements as observed in 2000 and 2010, although the region seems to have stagnated since 2000 (UNECA, 2013).

Table 1 showed these trends. Angola and Botswana, for example, have significantly shifted their economies from agriculture to industry between 1980 and 2010, accompanied by significant growth of the services sector in Botswana (for details see Annex 1). Other countries such as Mauritius, Seychelles and Namibia have achieved significant shifts towards service-centred economies supported by low share but of quality industrial and manufacturing production. Yet others such as Madagascar, Malawi and Mozambique still have agriculture as a more significant contributor to GDP than industry, although the gap between the two sectors is narrowing, particularly in Mozambique.

Services is also generally emerging as a key sector in most countries, with manufacturing being pulled along to serve growing and more sophisticated consumer tastes.

UNECA, 2013

majority of the citizens. The following are some of the common challenges that have hampered the pace of any meaningful industrialization in the sub-region.

Market reforms in most cases have eroded state influence and power to utilize “carrots and sticks” to address market weaknesses. These reforms also relegated conventional industry development initiatives such as the infant industry approaches, that allowed industries to develop through “learning by doing” concepts, and the popular reverse engineering models of the East Asian tigers, such as Japan, Thailand and Singapore.

Lack of political will – the whole regional agenda should transcend beyond fora to anchor in national contexts, and allow private sector expectations to influence both inputs and outputs.

Upon independence, most SADC economies inherited a dual and enclave economy, where a formal sector co-exists with a largely dominant informal sector. Policies employed then, have of consequence underplayed the significance of this non-formal economy, which has birthed SMEs among other economic actors, yet East and South East Asian economies as well as some European economies have benefitted from these SMEs.

The region hosts a huge bank of mineral resources, yet it has not been able to take full advantage of this and has failed to exploit the huge locational advantage of these resources. This exploitation could be done through the creation of industrial hubs built around the huge potential resource processing capacity embedded in these reserves. Such industries could then provide throughput to related manufacturing capacity needs, and thus overcome the inertia and unlock the wealth creation potential of these resources.

The design of industrial policies in the SADC region has not fully taken into account all these issues flagged for completeness. The industrial agenda will remain difficult to advance unless some of these policy-related challenges are addressed, while at the same time fully exploring the structural development constraints to guide the choice of appropriate interventions.

4.2.2 Factors Inhibiting Industrialization of Manufacturing

The following factors featured under Box 6 have a bearing on the extent to which this strategic sector can play an importation role in the industrialization endeavours of the SADC region:

Box 6

Factors Constraining Realization of the Regional Manufacturing Sector's Potential for Industrialization

- Understanding the role of the development state in tackling market failures (East Asian Tigers used the carrot-and-stick approach).
- Lack of political will and a shared vision with all economic actors and those negatively affected by policy adjustments.
- Policies have underplayed the significance of the non-formal economy which has birthed SMEs, yet early industrialization timers understood this nexus and benefitted from SMEs.
- Dual economies inherited at independence have subsisted to present-day economics.
- Limited coherence in industrial policies across member states has limited the flexibility for response to changing global production and trading systems.
- The huge bank of untapped natural resources has not been leveraged to unleash a resource-led industrial transformation model in which industrial hubs could emerge and provide throughput to related manufacturing capacity needs.
- Lack of regional capital markets for the support of value-chain projects by firms that link production at the national and regional levels.
- At a micro level, lack of firm strategies that foster to expand beyond local production frontiers, hence limiting innovation.

Author's compilation

4.2.3 Maximising the Contribution of Manufacturing Sector through a Regional Roadmap for Industrialization

Special Economic Zones and Industrial Development

Experiences of China's industrial development since the 1980s confirm the significance of Special Economic Zones (SEZs) in economic development. The term "Special Economic Zone" is a blanket nomenclature used to describe a variety of economic structures including, but not limited to, Free Trade Zones, Industrial Zones and Freeports. These are best understood as spatially defined geographic areas designed and created to attract foreign investment by providing favourable economic and commercial policies along with quality infrastructure intended to lower transaction costs for investors (Giannecchini, 2011).

"This model has since been replicated over the last 35 years in China, turning the country from a previously agro-based economy into one that now derives about 90 percent of its income from industrial and service sectors. China is already supporting SEZs in African states, namely Egypt, Ethiopia, Mauritius, Nigeria and Zambia" (Madakufamba, 2014:9). The SADC region could therefore, leverage these positive China-Africa policy interventions through South-South cooperation.

Similar initiatives have begun to be implemented in the SADC region. A SEZ Act was promulgated in South Africa in June 2014 providing for the development of industrial development zones; free ports; industrial parks/estates; science and technology parks; sector development zones; and spatial development corridors.

Botswana has taken the initiative to diversify its economy from a heavy dependence on diamond revenues towards manufacturing. The strategy focuses on the creation of a number of "hubs", or economic areas, as part of the diversification initiative. The zones host a variety of activities and services including warehouses, manufacturing under bond, logistics platforms, shared processing facilities, etc., which facilitate competitiveness of wider industry clusters. Infrastructure such as industrial parks are a major component of the zones which can be used as testing grounds for new and innovative production technologies before they are adopted elsewhere in the country.

Given the potential of SEZs to unlock industrial development, there is need to take a regional approach to maximize their contribution to balanced regional growth and development.

Integrated Development Value Chain Approach

What is key towards reversing the current industrialization lulls in the sub-region is to craft an Industrialization Roadmap anchored on an **integrated development value chain approach**. Such an approach would require clusters to be viewed not merely as a concentration of small firms, but as interdependent networks of raw material providers, machinery suppliers, transporters, buyers, sellers and support institutions that face common challenges and opportunities, nationally and regionally.

The development of regional economic frontiers/ hubs would then be informed by the drive to maximize the competitive and comparative advantage for a broad-based and shared growth model. The state has to regain some of its market regulatory power and become a development state. The global economic and financial crisis of 2008 was the manifestation of a scenario where the market was taking full charge, yet when disaster struck, government had to take centre stage to finance corporate bailouts through state (tax) revenues.

Development of a trading regime in the region that allows private capital to thrive, and hence business innovation and technology development as well as transfer to complement local capacities holds key to the anticipated industrial transformation. Locally developed technologies must be given more priority.

The system should support institutional links between large and small enterprises. Industrial rehabilitation is also important to achieve efficiency gains, from the firm level onwards.

An agricultural policy should be part of this industrialization equation to ensure balanced economic development. Rural development will no doubt reverse the poverty strains on economic development – and the growth of the rural enterprise sector around agro-processing and agri-business can have a profound effect on addressing poverty in the sub-region.

Toll Manufacturing

Given the apparent variation in industrial development across SADC Member States, some low-hanging fruits could include the promotion of toll-manufacturing initiatives across countries. For example, Zimbabwe has relatively well-developed industry production infrastructure, which is currently underutilized. The country is also facing an acute liquidity strain to finance production. Therefore, the country can benefit significantly from toll manufacturing as this addresses the challenges of financial capacity to import raw materials, and challenges related to working capital. This could create a win-win situation for SADC Member States depending on their own production challenges.

4.2.4 Key Policy Considerations for the SADC Region

For SADC to map out a viable and durable industrialization programme, this must be informed by the realization of a political economy that has shaped the post-independence development nexus. This development nexus has underestimated the significance of structural bottlenecks inherited upon independence that has continued to sustain the growth of a small formal economy, at the expense of the non-formal economy, largely subsistence yet growing in terms of size and population – **the dual economy**.

This is still the same sector that hosts thriving SMEs activities. What is needed therefore, is for the region to anchor an industrialization strategy within an integrated inclusive business model involving the private sector, **Public-Private-Partnerships (PPPs)**, and an active role of the political leadership and national institutions (ZimConsult 2011:19).

An **integrated development value chain approach** would require production clusters in industry to be viewed not merely as a concentration of small firms, but as interdependent networks comprising of raw material providers, machinery suppliers, transporters, buyers, sellers and support institutions that face common challenges and opportunities, nationally and regionally.

This can create the conditions necessary to trigger a structural shift in production that will entail, among other strategic initiatives, deliberate efforts to shift gear from low-value production towards more **value-addition and beneficiation**.

4.3 Mining Sector and Prospects for Beneficiation

Most SADC Member States are endowed with vast mineral resources. South Africa and Zimbabwe host about 80 percent of the world's Platinum Group Minerals (PGMs) and chromite resources. Vast deposits of coal, both thermal and metallurgical, are mined in significant quantities in Botswana, Malawi, Mozambique, South Africa, Zimbabwe and Zambia. Angola, Botswana, DRC, Namibia, South Africa and Zimbabwe provide about 60 percent of the world's rough diamonds.

Base metals, especially nickel and/or copper, are extracted profitably in Botswana, DRC, South Africa, Zambia and Zimbabwe. Other mineral products from deposits which occur in large proportions in SADC countries include aluminium, uranium, gold, iron ore, asbestos, tin, fluorspar, manganese, limestone and zinc. The energy mix and challenges currently afflicting the region could well be addressed through exploitation of the natural, shale and coal-bed methane gas deposits that have been discovered in recent years in Botswana, Malawi, Mozambique, Namibia, South Africa, Tanzania and Zimbabwe.

The mineral resources provide the SADC region with a comparative advantage and present a springboard for socio-economic development of the region. For example, given the growing demand for platinum as a catalyst in reducing air pollution and in jewellery, increased production of PGMs, beneficiation and value addition would present a unique opportunity for developing world class mines and processing facilities that could support vibrant metallurgical and manufacturing industries.

The challenge for SADC is how to turn its comparative advantage based on its mineral resources into a competitive advantage. It is important that SADC industrializes while placing emphasis on innovation for its economic transformation to be sustainable. In Zimbabwe, the government has launched the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) as its guiding economic blueprint and one of its four main pillars is Beneficiation and Value Addition of the country's natural resources.

There are, however, some fundamental questions to be answered in the quest to achieve the African Mining Vision and these include:

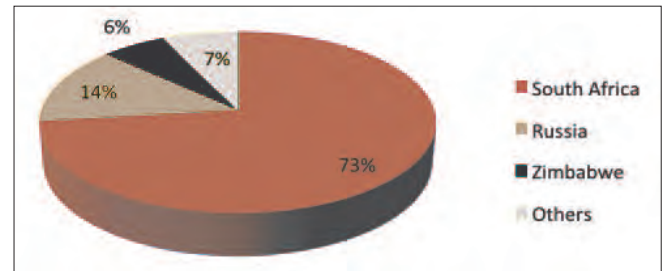
- ◆ what are the exact quantities and location of the minerals in each country, economic block or region?
- ◆ what is the capital value of the mineral resources in each country?

While the first question could well be answered by conducting extensive exploration employing accurate methods in each country or region, the second question is one that sparks debate with limited convergence depending on whether one is a producer or receiver/consumer of minerals. Using an input-outputs systems model, Wright (2002) argued that the conventional application of mineral economics was so flawed on this aspect to the extent that African, and indeed other mineral rich countries in the world, often had nothing much to show for their mineral endowment other than “holes in the ground”. The conventional approach did not consider the mineral resource as an asset until after exploration and ore reserve estimation.

4.3.1 Production Trends in SADC

The SADC region is a significant player in the global production and supply of various mineral products, for example, platinum group minerals, as illustrated in Figure 2. This excludes recycled platinum. The contribution of the mining sector to the GDP of SADC countries during the period 2002 to 2012 is shown in Table 4.

Fig 2 2012 World Platinum Supply



Data from Johnson Matthey, 2013

Table 4 Mining Sector Contribution to GDP 2002-2012

Industrial Activity	Average % of GDP 2002-2012
Agriculture	8.9
Mining and Quarrying	13.7
Manufacturing	14.3
Electricity, Gas and Water	2.3
Construction	4.1
Wholesale and Retail Trade, Restaurants, Hotels	14.4
Transport and Communication	8.3
Finance, Insurance, Real Estate and Business Activities	15.9
General Government Services	12.3
Other Services	5.8

SADC Statistics Yearbook, 2013

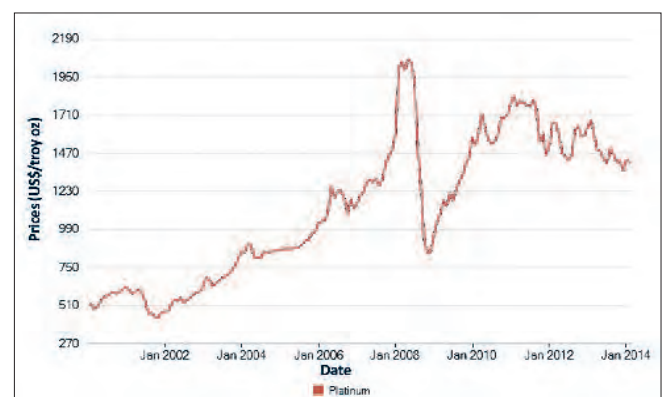
4.3.2 The Mining Sector and the Case for Beneficiation and Value Addition

The beneficiation of minerals is the processing of mined ore to separate valuable mineral products from the associated waste rock or impurities. The extent to which this is done determines whether the product is intermediate in its purity and should be processed further or is refined, ready for further value addition through manufacturing.

Fluctuation of Mineral Commodity Prices

The frequent decline in mineral commodity prices, which is often beyond the control of producing countries, is one major reason why beneficiation and value addition of their minerals is important. Although the theory of demand and supply prevails with respect to pricing, it is common knowledge that the prices of jewellery, electronic products, etc. seldom fall in response to the drop in the prices of gold, platinum or related metals from which the products are made. As an illustration depicted in Figure 3, the price of platinum has generally risen in the last two decades from about \$300/oz in 2000 to \$1440/oz in March 2014 but has seen a relentless downward trend to approximately \$1200/oz in December 2014.

Fig 3 The Price of Platinum from January 2000 to March 2014



www.platinum.matthey.com

This downward trend in price is occurring despite the fact that the demand for auto-catalysts continues to rise and the prices of such vehicles is not decreasing in sympathy with that of platinum. This example therefore supports, to some extent, the argument that value addition to end uses or applications would have the effect of cushioning producers from price fluctuations.

Employment Creation

The potential employment and downstream economic benefits undoubtedly favour development of mineral beneficiation facilities in SADC. Some countries in the region have witnessed a dramatic fall in employment levels and migration of skills as beneficiation and manufacturing activities migrated to other countries, mainly outside SADC. In Zimbabwe, for example, the closure of steel-making operations at ZISCO, and smelting and refining operations at ZMDC's Alaska metallurgical complex and Bindura Nickel Corporation were accompanied by notable workforce downsizing.

Maximising Revenue and Profit Margins

It is often the case that the value of primary products such as rough diamonds is several times less than that of polished and cut diamonds or jewellery. In some cases, this can be as much as tenfold because the real value of rough diamonds is difficult to ascertain. Similarly, in the case of coal or iron ore, the primary products are bulky and attract relatively high transportation costs yet metallurgical coke and steel are much higher in value and less bulky. The downstream processes, though requiring higher skills and knowledge levels, tend to generate higher profit margins.

Preventing Transfer Pricing

Many cases have been noted internationally in which multinational companies have been accused of transfer pricing across national borders and it is clear that the companies operating in SADC would be keen to avoid such suspicions. It is therefore in the interests of those companies to protect their corporate images by beneficiating and adding value to minerals in the countries or regions of extraction. The relocation of the De Beers Diamond Trading Centre from London to Gaborone in 2013 is one example of confidence-building in line with international best practice.

A common theme in international principles which include the African Mining Vision, the Extractive Industries Transparency Initiative (EITI), the Natural Resources Charter, and the United Nations Guiding Principles on Business and Human Rights, is that fiscal policies and contractual terms should ensure that each country gets full benefit from its resources, subject to attracting the investment necessary to realize that benefit. Mining, being a capital intensive and long-term, natural resource based extractive industry, therefore requires policies and contracts that continue to provide benefits to the host country over the life of the resources.

Expansion of Capacity to Meet Demand

In Zimbabwe, the case for base metal and precious metal refining is overwhelming, especially given the vast PGM resources in the country. It is clear that as production capacity continues to increase, the capacity of the refineries in South Africa will be saturated.

For Impala Platinum, the Zimbabwean mines are relatively shallow, low-cost operations run by a small, skilled workforce compared with their mines near Rustenburg in South Africa which are deep, high-cost operations run by a large and not so skilled workforce that is increasingly militant (Ryan, 2014). The industrial relations climate in Zimbabwe makes it more conducive to operate a mine in the country than in South Africa.

Failure to cope with the rising demand can result in the market shifting resources to the development of alternatives as well as technologies to recycle materials, thus becoming self-sufficient and threatening the long term viability of the primary production business.

Provision of Inputs for Downstream Industries/Manufacturing

Local beneficiation and value addition is important in that it provides the feedstock for manufacturing and industrialization, which in turn supplies equipment and machinery for the mining, beneficiation and value addition processes.

4.3.3 How Should SADC Implement Beneficiation and Value Addition?

It is imperative that SADC Member States should leverage their comparative advantage based on natural resources and create a strong supporting cluster around value addition and beneficiation of those resources. Extensive research by Michael Porter of Harvard Business School confirms this position and is well summarized in his book *The Competitive Advantage of Nations*, which could well be extended to regional economic communities such as SADC.

In his research, Porter (1990) found out that in the long run, “National prosperity is created, not inherited. A nation’s competitiveness depends on its industry’s capacity to innovate and upgrade.” He defined the pathway to competitive advantage in the form of the Diamond theory which is shown as Figure 4.

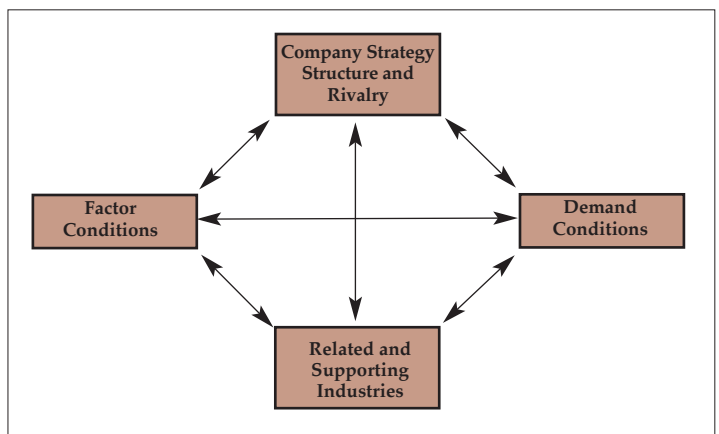
Porter’s message is that the following elements are critical to creating competitive advantage:

1. **Factor Conditions.** This is the position of a nation or region in factors of production, such as the skilled labour or infrastructure that is necessary to compete in a given industry.
2. **Demand Conditions.** This describes the nature of home-market demand for the industry’s product or service.
3. **Related and Supporting Industries.** The presence or absence in the nation or region of supplier industries and other related industries that are internationally competitive is a critical element.
4. **Firm Strategy, Structure, and Rivalry.** The conditions in the nation or region governing how companies are created, organised, and managed, as well as the nature of domestic rivalry. This basically relates to the enabling legislation in the relevant countries.

Successful implementation of the industrialization policy should lead to the creation of world class companies that compete in the global marketplace. It is therefore, important that the region opens up to international ideas, experiences and expertise of those who have done it successfully so that there is no re-inventing the wheel.

As SADC unlocks the wealth derived from its mineral and other natural resources, it is prudent that it adopts the special economic zones model which allows it to implement new economic transformation ideas while managing the risks that may be associated

Fig 4 **Determinants of National Competitive Advantage – The Diamond Theory**



Michael Porter, 1990

with such innovation. Madakufamba (2014) noted that since the 1980s, Special Economic Zones were introduced in China through careful experimentation, starting in Guangdong province and the remarkable story of Shenzhen, which was transformed from a fishing village into an ultra-modern industrial city.

Promote Investment in the Mining Sector

Mining and beneficiation of minerals is generally capital intensive and it is imperative that governments in the region put in place and implement policies that attract international investors as well as promote investment in the sector by indigenous people.

The socio-economic benefits of such investment and development include increased revenue inflows, industrialization and employment levels. However, an impediment to mutually beneficial investment is often the lack of information on the quantity and quality of the deposit.

Exploration

An important step in adding momentum to mining, beneficiation and value addition, and therefore industrialization, is the determination of the level of mineral endowment in each country in the region through exploration. Modern methods of exploration, especially airborne, could be implemented on a collaborative basis by neighbouring countries in the SADC region.

Linked closely with this exploration is the need to create computerised databases and to evaluate the capital value of mineral resources revealed by the exploration efforts.

Beneficiation and Value Addition

It is critical that the sector adopts technologies which are efficient and cost effective so that value is not discarded together with impurities. There is abundant evidence in the region of such inefficiency in the form of high-value dumps which are constantly being re-processed. It is of critical importance that mineral producers in the SADC region remain competitive in terms of productivity, economies of scale and related costs of production as this will guarantee fairly priced inputs for the downstream manufacturing industries.

Companies currently involved with largescale mining should be encouraged, through fiscal incentives and taxation, to progressively move towards fullscale beneficiation and value addition as close to the extraction point as possible. In the case of Zimbabwe, fiscal policies have been put in place for chrome, PGMs, base metals, diamonds and other minerals. As a direct result of these interventions, Bindura Nickel Corporation is refurbishing its smelter, while ZimPlats is also refurbishing and expanding its base metal refinery, both plants having been mothballed in the early 2000s.

If a mining company chooses to concentrate on its primary and core business of mining with minimal beneficiation, then it should be encouraged to facilitate downstream processes by other players including local communities and smallscale enterprises.

The region, therefore, requires aligned policies, programmes and action plans to achieve satisfactory levels of mineral beneficiation and value addition.

Support for Smallscale Enterprises

Artisanal Smallscale Mining (ASM) often precedes and provides valuable information for largescale mining and allows the exploitation of deposits that are not amenable to largescale mining.

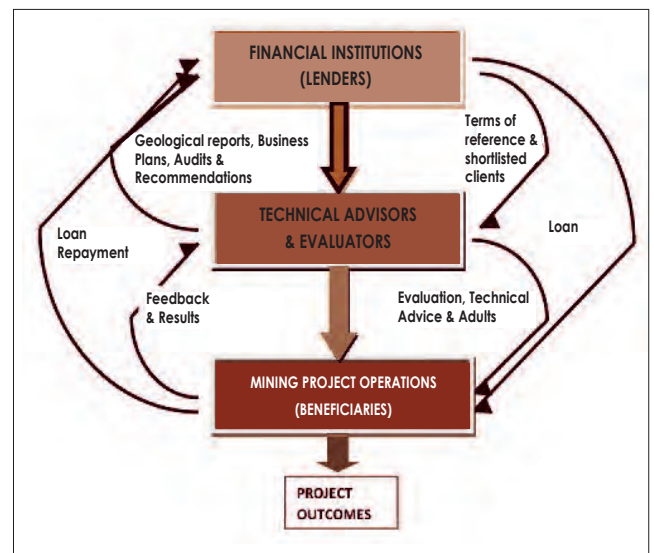
Smallscale enterprises focusing on value addition such as diamond cutting and polishing, jewellery manufacturing and related occupations are an important component of industrialization as they provide incomes and contribute to socio-economic transformation.

Governments should promote capacity building among smallscale miners and related entrepreneurs, through technical and management skills, expertise and technology. A critical barrier identified in the promotion of smallscale mining and related entrepreneurship is the reluctance by financial institutions to fund smallscale miners, especially women in mining (Dzinomwa et al, 2014). It was recognised that financial institutions were concerned about the risk of non-payment of loans due to the lack of expertise by the smallscale miners. A model should be developed to minimise this risk while maximising production.

Under the model shown in Figures 5, the financial institutions would provide loans and the smallscale miners, as beneficiaries, would repay the loans, while the latter's capacity would be enhanced through provision of relevant experts. The experts would:

- Carry out proper evaluation of prospective projects from a technical point of view, in terms of geological resources, technology (equipment and processes) and human expertise (key personnel);
- Carry out due diligence studies on mining projects and operations;
- Advise on possible risks that are associated with all mining projects that the bank would be evaluating;
- Provide technical expertise to recipients so they can sustain the capacity to pay back the loans received, as this benefits both the financial institution and the recipients of loans;
- Ensure that there is compliance with the mining, environmental and other relevant legislation; and,
- Monitor operations in the pre- and post-lending phases.

Fig 5 Funding and Project Implementation Model for Smallscale Mining Projects



Michael Porter, 1990

Technical Support, Education, and Research and Development Institutions

To provide a platform for sustainable mining, beneficiation and value addition, and indeed industrialization of the national and regional economies, strong institutions should be put in place to champion education, research and development in areas such as:

- **Geology.** This will provide the knowledge required for effective exploration;
- **Mining.** Especially rock mechanics, ventilation, technology, deep mining, etc;
- **Metallurgy.** Beneficiation not only ensures that the region maximizes revenue from its mineral products, but also reduces transportation costs that arise from exporting low value commodities which are still in combination with significant impurities;
- **Analytical** (chemistry);
- **Environmental management;** and,
- **Design and manufacturing.**

Various countries in the region have technical colleges and universities offering relevant courses, and these should be strengthened. The curricula in high schools should be aligned to promote development.

In Zimbabwe for example, institutions that offer mining, environmental and mineral beneficiation-related courses include:

- Zimbabwe School of Mines;
- University of Zimbabwe;
- Midlands State University;
- National University of Science and Technology;
- Bindura State University;
- Harare Institute of Technology; and
- Chinhoyi University of Technology.

According to the Ministry of Mines and Mining Development, there are also plans to establish the Pan African Minerals University of Science and Technology (PAMUST) whose primary objective would be to be a centre of excellence for mineral research and development, and higher education. Other research and development centres in the country that could be developed to serve the whole region include:

- Scientific and Industrial Research and Development Centre;
- Institute of Mining Research; and
- Department of Metallurgy under the Ministry of Mines and Mining Development.

Linkages should be created between the above institutions and other regional and international mining universities and research and development institutions such as MINTEK of South Africa, and the mining industry at large.

Management of Industrial and Community Relations

To minimize disruptions to production and continued progress towards industrialization, governments and the private sector in the region should ensure that the industrial relations climate on the mines are managed in a way that maximizes production. The recent (2014) platinum industry strike in South Africa that lasted for half a year is an example of an unfavourable industrial relations climate which should be avoided as much as possible.

It is also important to ensure that organisations involved in extracting and beneficiating minerals engage the communities surrounding their operations and practice good Corporate Social Responsibility (CSR) programmes in order to maintain productive relations with the communities.

Provision of Enablers

It goes without saying that the African Mining Vision (AU, 2009) may only be realised provided that governments and the private sector work together through smart partnerships (PPPs) to provide key production enablers, chief among them being:

- **Energy.** The SADC region is bedevilled by a critical shortage of power which results in the implementation of energy-rationing schemes such as load-shedding programmes and power outages. These have a negative bearing on plant and machinery maintenance, production and ability of exporting firms to fulfil orders. These erratic supplies of key utilities erode efficiencies in production, and hence industrial competitiveness. The construction of power stations should be a major priority if the industrialization agenda is to yield any meaningful results.
- **Transport Infrastructure.** Minerals and mineral products need to be transported between processing facilities, and also to the market. Provision of good roads, rail, ports and airport facilities is critical to the successful implementation of the industrialization policy.

- **Communication Facilities.** Communication infrastructure is essential for efficient production and it facilitates real time online trading.

Fostering Sustainability

Sustainability of operations may be achieved through:

- **Community Based Ownership.** The involvement of the community groups including women in which mining and/or beneficiation takes place ensures checks and balances by people with long-term interests in both the business and the land.
- **Good Environmental Management.** Responsible mining, beneficiation and land rehabilitation gives the industry a good public image and land to fall back on once the mineral resources have been exhausted.
- **Good Health and Safety Management Practices.** Accident free mining and beneficiation operations should be promoted by both Government and the private sector in order to boost morale and promote productivity at the workplace.

Regional Integration

There are some good examples of regional integration activities, such as those featured in Box 7, which have already been implemented within the mining industry among SADC member countries, highlighting the opportunities for toll processing.

Policies, Regulations and Administration

Mining and beneficiation policies, regulations and administration procedures should be harmonised in the region and aligned so as to:

- Create a stable and predictable investment climate;
- Provide investment incentives, which do not threaten investors with the prospect of nationalization of their investments;
- Promote detailed exploration;
- Promote skills development and encourage skilled nationals living in the Diaspora to return and contribute to the socio-economic development in their countries as well as their regional economic communities;
- Attract specialist skills that are in short supply in the countries/region; and
- Promote research and technology development.

4.4 Potential of the Micro, Small and Medium Enterprises (MSMEs) to Contribute to Industrialization

Industrialization is an effective means for solving the problems of economic and social progress in developing countries (Uma, 2013:1). The SADC region would thus benefit immensely from industrial growth. Uma (2013) in his review of the role of India's economic development, notes that entrepreneurship is indispensable to accelerate industrial growth, and Micro, and Small to Medium Scale Enterprises (MSMEs) stand out as an effective means for the development of entrepreneurship. MSMEs are also a solution to the problems of poverty, insecurity and unemployment in global economics.

Box 7

Examples of Regional Integration - Toll Processing

Nickel concentrates from Nkomati in South Africa, combined with those from Tati and BCL in Botswana, are toll smelted at the BCL smelter in Selebi Phikwe, Botswana to produce a high value product called matte. The matte is then toll refined at Empress Nickel Refinery in Zimbabwe to produce highly purified nickel and copper which is then exported offshore.

Copper concentrates from DRC were further beneficiated at Alaska Smelter and Refinery in Zimbabwe before export of refined copper to Europe prior to the closure of the Alaska metallurgical plant due to insufficient feed and low copper prices in the 1980s.

Further beneficiation of PGM concentrates from various Zimbabwean mines at South African Smelters and Refineries as part of vertical integration by Impala Platinum and Anglo Platinum.

Toll refining of by-products from the coal to coke-making operations in South Africa such as crude benzole to produce benzene, toluene and xylene, and crude tar to produce prime tar, creosote and soft pitch at Zimchem Refiners in Zimbabwe before exporting the refined products back to South Africa.

The International Financial Corporation (IFC) estimates that Small and Medium-Scale Industries (SMIs) contribute about 45 percent of manufacturing employment and 29 percent of manufacturing GDP in developing countries, compared to 67 percent and 49 percent in the industrialized countries.

Taking a global perspective, estimates suggest that more than 95 percent of enterprises across the world are SMEs, accounting for approximately 60 percent of private sector employment (Ayyagari et al, 2011). Japan has the highest proportion of MSMEs among the industrialized countries, accounting for more than 99 percent of total enterprises (EIU 2010). India had 13 million MSMEs in 2008, equivalent to 80 percent of all the country's businesses (Ghatak 2010).

The poverty dynamics in southern Africa could be altered substantially if the sub-region created business conditions that afford MSMEs room to thrive.

Nkongolo (2008) observes that Africa's industrialization requires a strategy centred on MSMEs, highlighting that if tailored to substantially engage these enterprises, it would achieve the dual objective of growth with equity and collective empowerment of the people to fully participate in the design and management of long-lasting development paradigms.

It is given this background that the development of the SADC industrialization agenda would have a major void if MSMEs are not assigned an important role in the transformation of the region's economies into sustainable economic and human development paths.

4.4.1 SADC-wide Imperatives for Micro, Small and Medium Enterprises

Micro, Small and Medium Enterprises (MSMEs) are an important variable in the development equation of the SADC region, representing 90 percent of all businesses, while also accounting for more than 50 percent of employment and the region's GDP. In South Africa, it is estimated that 91 percent of the formal business entities are SMEs (Abor & Quartey, 2010).

A Study by Finscope in 2012 established that the sector now employs 5.7 million people in Zimbabwe, substantially reducing unemployment to the present level of around 11 percent. "The role of MSMEs in Zimbabwe increased as the economy de-industrialized, especially following the liberalisation of trade through the Economic Structural Adjustment Programme (ESAP, 1990-1995). The Medium Term Plan (MTP, 2011-2015) notes that the MSME sector accounts for an estimated 60 percent of GDP and approximately 50 percent of employment (Kanyenze, 2013:21).

It has also been observed that 12-29 percent of SMEs in countries such as Angola, Namibia, South Africa and Zambia employ more than five employees (CAI Report). Job creation is particularly important for countries that are plagued by high unemployment rates and in general for developing and emerging economies. Table 5 shows the significance of this sector in addressing unemployment challenges, and contribution to private sector output for selected SADC countries.

Table 5 MSME Share of Employment and Private Sector Value Added

Country	% Share	% of Private Sector Value Added
Malawi	39	50
Zambia	37	60-70
South Africa	21	50
Tanzania	32	52-57

Sveinung, Grunfeld & Green, 2010

“In terms of sector concentration, these firms play a pivotal role in industrial development, firm restructuring, satisfying rising local demand for services, allowing for increased specialisation and supporting larger firms with inputs and services. That way, MSMEs become engines that sustain growth for long term development” (Sveinung et al, 2010:3). In the SADC context, apart from the services sector (though not exhaustive), these enterprises are also domiciled in the following sub-sectors: agro-food processing; wood and furniture; construction; clothing and textiles; leather and leather products; artisanal and engineering services; pharmaceuticals and chemicals; machinery and equipment.

Almost all SADC Member States have developed policies to nurture and develop MSMEs, while also dedicating institutional capacities to champion these programmes, with varied success rates. In the case of Botswana, the Industrial Development Policy; the Small, Medium and Micro Enterprises (SMME) Policy; and the Citizen Entrepreneurial Development Agency (CEDA), are key policy and institutional structures to support enterprise development. Box 8 shows a menu of initiatives at national level that provide financial support to MSMEs for selected countries, including Botswana.

Box 8

Interventions to Support MSMEs Funding Needs

BOTSWANA

Citizen Economic Empowerment (CEE) programmes that create economic opportunities for the private sector is implemented by two non-governmental bodies – the Citizen Entrepreneurial Development Agency (CEDA) which was established in 2002 and the Local Enterprise Authority (LEA) created by the Small Business Act No. 7 of 2004. These offer funds, training and mentorship to individuals to venture into business. The funds are availed at subsidised rates to cover both working capital and machinery requirements. LEA is responsible for business development services other than funding, and tests the entrepreneurial capabilities of interested persons before capacitating them and assisting them to develop business plans and accessing funding.

ANGOLA

Angola Invests Programme This is an initiative of the Angolan government that aims to facilitate access to credit for micro, small and medium-sized companies, in partnership with 20 banks operating in the country. Annual interest payments by the MSME do not exceed five percent and the government guarantee covers up to 70 percent of the loan principal. Enterprises can access loans within a threshold of US\$200,000-US\$5 million, depending on the size of the company.

MALAWI

Malawi Youth Development Fund (YEDEF) The programme provides young people with loans to start new businesses or expand existing business, and provides support towards the purchase of capital goods/machinery. The Fund has, however, been affected by high default rates.

NAMIBIA

Attention has been given to the role of sustainable enterprises (including cooperatives) in creating productive and decent employment, and encourages government to implement Recommendation 198 on job creation in SMEs and the 2006 promotion of sustainable enterprises guidelines. The development of a national microfinance policy is also central together with the need to revise the SMME policy to include the informal economy, whose integration is recommended. The strengthening of forward and backward linkages and the transition to formality are highlighted. The role of skills development in enhancing employability, competitiveness of enterprises and inclusiveness of growth, is integral to this, as well as entrepreneurial development and self-employment targeting the youths, women and people with disabilities, as well as informal economy operators.

ZIMBABWE

Small Enterprise Development Corporation (SEDCO) This corporate body provides financial support to SMEs in Zimbabwe. Government has since approved legislation to transform this institution into a bank to bring it into the mainstream financial system.

Kanyenze, G; InnovosGroup, and Government of Zimbabwe National Budget Statement

The thrust of the Namibian interventions seek to stem the apparent developmental dichotomy of the post-independence era, which if not tackled could stall development of a sustainable economic and human development path. “The dual structure of the economy comes out clearly in that those employed in the formal sector account for only 25.7 percent of the economically active population, while the unemployed and those in informal employment constitute 74.3 percent. Integrating the non-formal economy (subsistence and informal) is therefore an important building plank of a pro-poor, decent work, rich growth strategy” (Frederic and Kanyenze, 2011).

The limitations of some interventions captured in Box 8 is that they are either undercapitalised, or not fully mainstreamed into the private sector development initiatives at national level so as to maximize impact. In some cases, the programmes are not complimented by the requisite entrepreneurial development support programmes to improve the viability of the interventions following access to funding.

The need to capture MSMEs that specialise in high-value industries such as mining and manufacturing, and related downstream and upstream activities, cannot be underscored if these enterprises are to meaningfully contribute to the SADC region’s industrialization agenda. Experience has shown that in most cases microfinance credit available to the SMEs sector is not suitable for these enterprises as its focus is on short-term loans for working capital requirements, yet these institutions also require investment in plant and machinery.

Box 9

Factors Constraining the Contribution of MSMEs to Development

Unfavourable business operating environment – The regulatory and macroeconomic environment is skewed in favour of established large corporations for tax rates, business registration procedures, customs and trade, compliance, political instability, law and order enforcement. Labour market laws as well as bankruptcy laws.

High market entry barriers – Bureaucracy, corruption, and complex entry requirements raise business transaction costs for the sector. This reduces incentives to formalise business operations.

Access to capital – Limited access to domestic and external financial systems for credit purposes.

Weak property rights system – This limits the ability to generate quality collateral, and hence scope for participation in the formal business set-up.

Infrastructure bottlenecks – Weak physical infrastructure capacity (road, rail, air etc.) as well as limited scope to access key utilities such as energy and water, road transport etc., and lack of technological innovation.

Weak market information systems – This raises business costs and risks of venturing into new business initiatives and markets.

Weak linkages with established corporations – In the industrialized world, the fast-growing MSMEs tend to operate in tight relationships with larger firms.

Sveinung, F, et al (2010); Leutkenhorst (2004). Author’s compilation

A Study by Fafchamps and Quinn (2011) shows that funding for machinery by SMEs was mainly from retained earnings by the owners. The study found that 80 percent of funding for machinery by MSMEs was from retained earnings in Tanzania and at 86 percent and 88 percent, the figures are even higher in Zambia and Ethiopia respectively. It further revealed that access to finance for machinery from banks and financial institutions for these enterprises was six percent, four percent and 12 percent in Tanzania, Zambia and Malawi respectively. Thus, appropriate financing solutions are key to unlocking the viability of these strategic enterprises.

4.4.2 MSMEs — Flagging Some Constraining Factors to Industrialization

“MSMEs represent the biggest share in business establishments in practically all countries and play a key role in the industrialization of a developing country. They have unique characteristics on their own, as they are extremely flexible and can readily adapt to today’s ever-changing environment” (Nkongolo, 2008).

Notwithstanding the above spin-offs, the region’s national SMEs grapple with a myriad of challenges that have relegated these institutions to the fringes of mainstream economics, thus minimising their potential impact in industrial economics and regional development. Without being a formal enterprise, access to finance, new market opportunities and public sector services becomes a pipedream. Box 9 captures the factors constraining MSMEs, (though not exhaustive), but sheds some light on the key parameters.

4.4.3 Some Suggestions to Maximise the Role of MSMEs — The Role of the State

The identification and successful implementation of policies and interventions that support the MSME sector to realise its potential holds the key in fostering expansion of the region's productive base in the medium- to long-term. This will also maximise the contribution of the sector to the entire SADC-wide regional industrialization drive given the significance of this sector in the economic activities of member states as alluded to earlier.

There is need for a new dimension to the development discourse in the sub-region to one that embraces a re-defined role of the State, contrary to the neo-liberal thinking which assigns everything to the market. The global economic financial crisis of 2007 clearly demonstrates how it is costly to leave everything to the market. How can this be achieved? The following nature of the State addresses this.

Developmental State

The industrialization success of the Asian countries such as Singapore, Japan, South Korea and Thailand, are cases to study. Though circumstances have changed significantly globally, the state played a significant role in directing resources as well as creating conditions that allowed the economies to mainstream the informal sector into the formal sector, as the informal sector is the prime habitat of most MSMEs in the developing world.

“A Developmental State will have to adopt a new macroeconomic framework towards a more endogenously driven economic development strategy that overcomes the constraints of the current dual enclave economies that have, of consequence, relegated MSMEs to the fringes of economies at the expense of a small formal economy that is less integrated with the rest of the economy. The new approach must create linkages between economic sectors and break the continued marginalisation experienced by workers and operators in the informal economy and communal subsistence economy” (Kanyenze and Jauch, 2011).

The debate can cascade to the regional economy and achieve the same positive results.

Property Systems

The Property Systems in most developing countries are skewed in favour of the formal economy, thus marginalising the assets of the poor and the MSMEs. The SADC region is no exception. This is the whole debate of the political economy of development, and post-independence governments have not changed this economic problem to present-day realities – yet this is hampering any prospects for a broad-based inclusive industrial development process. Such a process would no doubt translate into a shared and broad-based human development outcome in the SADC region in the medium- to long-term.

The current scenario of the skewed property system “thus undermines the prospects of creating synergies to close the missing links and subsequently creating robust value chains between MSMEs and formal sector firms. So long as there is legal failure that prevents the majority of enterprises from fully participating in recognised national legal property systems, this will continue to defeat the division of labour, relegate these small businesses (MSMEs) to smaller circles of specialization, smaller networks and low productivity” (ZimConsult: 2011).

The State will also need to deploy systematic and strategic support and protection for emerging industries, in order to absorb some measure of business risks, coupled with strategic establishment of production value chains, nationally that feed into the re-



gional value chain strata. The approach should also promote clusters among MSMEs in the region to build higher production frontiers going forward that generate scale economies.

Governments should take centre stage on the policies to develop integrated domestic/regional value chains that facilitate linkages between large enterprises and MSMEs, given the political premiums from the attendant expansion of the formal sector activities to the rest of the economy / region and hence reduce the dual enclave nature inherited upon independence.

To support this industrialization model which has the potential to unleash the productive capacities of MSMEs, the State would also need to invest in the transformation of technologies and entrepreneurship capacity of the sector which constitutes a large chunk of the economy.

4.4.4 Policy Considerations and Conclusion

Apart from motivating a shift in the political economy of strategies to mainstream MSMEs into the national and regional industrial development agenda, there could be policy entry points in the short to medium term. Some of these policies have thrived well in countries that have plotted successful regional industrialization programmes and included the following, thought not limited to these points:

- ✦ **Create a conducive business-operating environment.** Create a business-friendly regulatory and fiscal regime/system, that is, one that facilitates the unhindered graduation of these institutions from informality to formality.
- ✦ **Financial inclusivity.** Financial deepening can create the conditions that facilitate the accommodation of the informal sector into mainstream banking. This can now be supported by innovative technological platforms and ICTs that have enhanced product variety and development in the sector. Thus, suitable products can now be developed to meet the specific and unique needs of the MSMEs.
- ✦ **Physical and soft infrastructure investments.** This will significantly ease the costs of market entry, and the business transactions costs, a major resource leakage for these fragile enterprises.
- ✦ **Creation of MSMEs business incubators platforms.** For example, export “incubator” programmes for non-traditional value-added products and services to “fast track” graduation of small companies into resourceful enterprises through the provision of business-related facilities and services (e.g. finance) under one roof. This covers the provision of hand-holding business capacity, and mentorship programmes, factory shells, accounting tuition, and best business practice initiatives covering management, marketing sourcing/ procurement among other areas.

There are already such facilities regionally, the idea is to map these and create a network that can support regional late-comers.

- ✦ **Clustering and networking.** Clustering and networking have the potential to facilitate MSMEs’ ability to access external markets and compete on an equal footing with larger companies. Networks of mainly small firms, collaborating through specialisation and subcontracting, have been the key to success of many industrial districts in industrialized

countries such as Italy, Germany and India. In some developing countries, there are similar success stories in sectors such as ceramics, garments, leather, shoes, and electronic components.

- ◆ **SME export-support programmes.** Coordinate linkages between SMEs and exporting corporates in areas such as sub-contracting. This will entail the institutional capacity development of the SMEs (mentorship concept). SMEs link up with large domestic exporting firms and thereby integrate initially into domestic, regional and eventually into global production value chains through backward and forward linkages. These can provide phenomenal scope for the strengthening of value chain development in industrial and agriculture sectors, particularly in the rural areas.
- ◆ **South-South trade, intra-regional information sharing and technical assistance.** Given the success story of the Asian countries, and other emerging economies that were able to develop through the promotion of MSMEs, scope exists to learn from their experiences. Initiation of learnership and mentorship programmes that can be delivered through fostering South-South cooperation can have a positive bearing on the development of these enterprises. This provides scope for knowledge transfer and access to technology platforms.

In conclusion, it is abundantly clear that MSMEs will play an important role in the SADC region's quest to industrialize. The strategy should therefore create the conditions that allow these enterprises to thrive and hence migrate from their current seclusion in the informal enclaves towards the formal system. The political economy of development in the SADC region therefore, fundamentally has to recognise this issue and tackle it head-on to ensure inclusivity, and thus stem poverty.

5. INDUSTRIALIZATION AND TRADE NEXUS

5.1 SADC Position on Regional Integration

At the level of the African Union, the continent has been pursuing trade integration as a collective development and integration agenda leading to the eventual creation of an African Common Market. This agenda is premised on the notion that creating a bigger market offers opportunities for enhanced value-addition, creating possibilities of higher trade and by extension, better living standards for the continent's citizens. Applied at a regional context, this argument also holds true.

The SADC Treaty underlines the purpose of regional integration in its first objective: *"a) promote sustainable and equitable economic growth and socio-economic development that will ensure poverty alleviation with the ultimate objective of its eradication, enhance the standard and quality of life of the people of Southern Africa and support the socially disadvantaged through regional integration;"* (SADC Treaty, Article 5).

Following the SADC Treaty, the Member States developed the SADC Protocol on Trade as the central pillar of the integration effort in the region. The main objectives of this Protocol are:

- To further liberalise intra-regional trade in goods and services on the basis of fair, mutually equitable and beneficial trade arrangements, complemented by Protocols in other areas;
- To ensure efficient production within SADC reflecting the current and dynamic comparative advantages of its Members;
- To contribute towards the improvement of the climate for domestic, cross-border and foreign investment;
- To enhance the economic development, diversification and industrialization of the region; and
- To establish a Free Trade Area in the SADC region.

Although the objectives of the Protocol on Trade were balanced to include both trade and industry development, the provisions captured in the document emphasized the trade aspects overwhelmingly. The product-specific rules of origin, however, serve as a pointer to the value-addition direction that the region needs to take.

The RISDP further elaborates on the value-addition objective:

"The purpose of transforming Southern Africa Development Co-ordination Conference (SADCC) into SADC was to promote deeper economic cooperation and integration to help address many of the factors that make it difficult to sustain economic growth and socio-economic development, such as continued dependence on the exports of a few primary commodities" (RISDP, p 3).

The implication of this elaboration is that sustained socio-economic growth and development requires much more than just exporting primary commodities but that the region needs to add more value to its resources before exporting. Regional integration can enable member states to overcome the limitations imposed by the small size of their economies, through collectively creating the conditions for efficiently and competitively adding value to their primary products (i.e. mineral and agricultural). It is the trade in these beneficiated and value added products that offers hope for the improvement of the livelihoods of the region's citizens, based on experiences elsewhere in the developing world.

The strategy of value addition, especially through the creation of regional value chains, is given a lot more emphasis in the SADC Industrial Policy Framework.

5.2 Regional Integration as a Key Component of Industrialization

The 1996 SADC Protocol on Trade, a key part of the regional integration agenda, came into force in 2001 after ratification by the required two-thirds of Member States for the purpose of increasing intra-regional trade through liberalisation of industrial trade flows among members. Then it was hoped this would eventually lead to “deeper integration” in the region making industrialization possible, thereby leading to better living standards for the region’s population. It was no coincidence that the SADC Trade Protocol has been at the centre of the regional integration agenda.

It has been argued that “the current model of African development entailing the integration of the many previously fragmented post-colonial polities into larger regional economic communities has mostly been for purposes of creating larger markets for trade, with little collective focus on the supply side aspects such as investment in industrial capability and economic infrastructure” (Madakufamba, 2014).

The expectation has been that industrialization would follow the opening up of the economy and removal of tariff and non-tariff barriers. However, industrialization in southern Africa has not evolved in this way. There has been a realisation that industrialization requires more effort than just mentioning it in regional policy frameworks such as the RISDP.

The low level of intra-regional trade in SADC, estimated at about 15 percent (SADC, 2012), is a clear reflection of the low level of value addition in SADC. On average almost 90 percent of total exports from SADC Member States consists of mineral ores and minimally processed metals such as platinum group metals, rough diamonds, ferrochrome, copper, gold, crude oil, iron and steel, among others; and raw agricultural products such as cotton lint, tobacco, tea, etc. This has resulted in SADC countries being more significant players in the Global Value Chains (GVCs) where they remain anchored at the very bottom than in Regional Value Chains (RVCs) which offer better prospects for the region’s population.

Indeed, when looked at from the continental perspective, the situation remains the same. For example, while the EU and the USA together attracted about two-thirds of African exports and sourced more than half of African imports just 10 years ago, their influence has waned over the last decade. Over the same period, rising Asian economic giants China and India have evolved from marginal to strategic partners for Africa.

China has become the world’s second largest economy and is a principal benefactor of regional countries which have developed “Look East” policies in their individual capacities. China is now Africa’s main trading partner, with total trade between the two having reached \$163 billion in the year 2012 (Vhumbunu, 2013). The Forum for Africa China Cooperation (FOCAC) has seen China pledging billions of dollars mainly for infrastructure support for African countries, considering that infrastructure is one of Africa’s weakest points.

There is great potential for more trade expansion between Africa and China in the future, as Africa possesses the natural resources while China is equipped with capital and capital goods which can be used to invest in Africa’s infrastructure. However, these observed trends need to be cleverly managed so that they become an avenue for structural transformation of African economies. Indeed, most of southern Africa’s exports to traditional as well as emerging trade partners comprise low-value primary commodities, while imports consist mainly of value added intermediate inputs or final consumption products.

In that sense, while African nations remain anchored at the bottom of the GVCs, China’s increasing demand for African primary commodities presents the continent with an opportunity to leverage on that demand to get Chinese investment in value addition within the continent in a manner that will directly contribute to export diversification. The International Trade Centre (ITC) contends that by simply turning towards Asia, the region runs the risk of leaving itself more vulnerable to commodity price shocks than it is today (ITC, 2012).

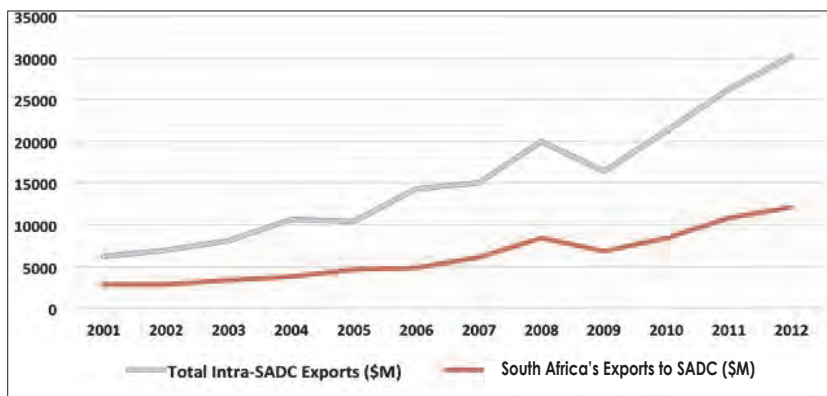
Export diversification in the trade with China should be at the centre of cooperation between China and the region. The ITC recommends export “diversification towards emerging markets, including in products with higher added value, combined with investment in trade infrastructure and simplified customs procedures to reduce the time and cost required to get products to market. The expected benefit for SSA of investing in trade-related infrastructure alone is an increase in exports of up to 51 percent beyond the baseline growth forecast, along with a GDP gain of US\$ 20 billion per year by 2025” (ITC, 2012).

5.3 Linkage with the RISDP Pillar on Industrialization and Market Integration

The RISDP was developed in 2003 with a goal aligned to the Protocol on Trade, to “Diversify the industrial structure and exports with more emphasis on value addition across all sectors by 2015.” The RISDP aims at diversifying exports to include non-traditional exports, while at the same time sustaining annual export growth rates at levels of five percent or more. Another key aim was to raise levels of intra-regional trade to at least 35 percent of all trade by 2008 and increase manufacturing sector percentage share of GDP to 25 percent by 2015.

SADC adopted product-specific rules of origin as one of the conditions necessary to encourage the export of value-added products to other member states. Indeed, the greater part of trade among SADC countries is in manufactured items although intra-regional trade constitutes less than 20 percent of their total trade, as shown in Table 6.

Fig 6 Intra-SADC Exports 2001-2012 (\$M)



Since the implementation of the SADC Protocol on Trade in 2001, although intra-SADC trade values have risen, the proportion of intra-trade when compared to total trade has fluctuated at a low rate of between 14 and 17 percent. The SADC data also shows that between 2001 and 2012, the proportion of manufacturing sector’s contribution to GDP (proxy for value added) declined from 16.9 to 11.6 percent.

Table 6 Some Key SADC Statistics

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Intra-SADC Trade as % of Total Trade *	15.9	18.0	16.5	16.3	14.0	14.1	14.1	13.7	15.2	15.4	15.2	17.0
Intra-SADC Exports as % of Total Exports *	13.3	15.2	14.1	14.4	11.2	12.5	11.6	11.4	13.4	13.0	12.7	15.3
Intra-SADC Imports as % of Total Imports *	18.7	20.9	18.8	18.0	16.8	15.7	16.5	16.2	16.9	18.0	18.0	18.7
SADC Manufacturing / GDP%	16.9	16.8	17.2	17.0	16.1	15.3	14.7	14.0	13.8	13.0	11.8	11.6

SADC Statistical Yearbook, 2012 * own calculations based on data from 2012 SADC Statistical Yearbook

Table 7 SADC MS Total Exports of Goods and Services (US\$ M) 2004-2013

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Angola	13359	26136	33326	45318	64084	41651	50773	67916	71748	69762
Botswana	4443	5249	5297	5873	5860	3745	4917	6782	6328	8149
DRC	2348	2443	2802	6540	7698	5021	7126	9804	10109	9321
Lesotho	702	665	762	832	909	790	971	1214	1048	946
Madagascar	1528	1422	1640	2227	2498	1911	2180	2646	2878	3025
Malawi	570	609	786	877	1025	1346	1222	1630	1387	1503
Mauritius	3476	3865	4141	4501	5120	4328	5084	6002	6277	6487
Mozambique	2011	2329	2556	2917	3212	3166	3079	3724	4464	4748
Namibia	2655	2918	3613	4468	4672	4228	5253	5176	5575	5528
Seychelles	617	721	855	853	899	852	841	947	933	1102
South Africa	57978	67617	78368	89962	98118	77892	103652	123752	114536	108696
Swaziland	2075	2236	2249	2309	1784	1771	2062	2643	2136	2000
Tanzania	2520	2961	3233	4119	5208	4963	6378	7440	8241	8724
Zambia	2057	2482	4120	4722	5178	4484	7573	8887	9670	10982
Zimbabwe	4129	4093	2515	n/a	1968	2250	3245	3557	3884	3507
SADC-Total	100467	125746	146263	175598	208235	158398	204355	252121	249213	244481

The greater part of intra-SADC trade consists of manufactured products and is dominated by South Africa (Table 7 and Figure 7) so its decline in GDP explains in this context the lack of growth in intra-SADC trade.

South Africa's trade balance with the rest of SADC rose by 181 percent between 2007 and 2012, or an average annual growth rate of 24 percent. This is clearly unsustainable and requires urgent redress.

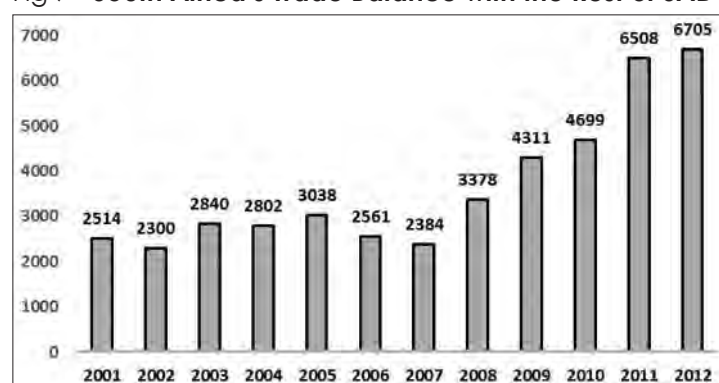
Complaints coming from some regional countries for a review of the rules of origin stem from the Member States' failure to increase their exports to neighbouring countries since their producers cannot meet the product-specific rules of origin in their areas of interest. The adoption of the rules in their present form and the subsequent raising of concerns reflects the non-inclusion of some key stakeholders during the trade negotiation phase.

However, it should be noted that unlike the Protocol on Trade which is binding, the RISDP, as the name suggests, is only indicative. "The RISDP is indicative in nature and outlines the necessary conditions that should be realised towards the attainment of SADC's regional integration and development goals" (RISDP p6).

This means that the strong statements on value-addition in the RISDP remain just that, statements not backed by any legal obligation. It is not surprising that there was a decline on the SADC average (not weighted) MVA from 12.19 percent in 2000 to 11.15 percent in 2007 (SADC, 2009)

The SADC report (2009) shows that Swaziland had the highest MVA to GDP contribution followed by Mozambique, South Africa, Lesotho and the Seychelles, while Mauritius was also significant. The figures show a wide range of MVA as percent of GDP with 3.25 percent for Botswana while Swaziland had 23.54 percent in 2007. This range shows that the SADC countries are at varied levels of development, a factor which should be taken into account in designing the regional trade and industrialization policy.

Fig 7 South Africa's Trade Balance with the Rest of SADC



A close look at the situation in the whole of Africa shows similarities with the southern African region. The share of intra-African trade is extremely low compared to other major regions, stagnating around 10-12 percent with no major progress registered over the last decade. In other words, Africa sourced more than 90 percent of its imports from beyond Africa and exported 90 percent of its products to the rest of the world, rather than to neighbouring countries. In southern Africa, intra-regional trade accounts for only 15 percent of the region's total trade (SADC, 2012). This is neither surprising nor unexpected. There is no demand for the mineral ores in neighbouring countries.

Angola's chief export is crude oil. There is no capacity to refine the crude oil in the region. Zambia exports copper and there is no conversion capacity in the region. South Africa and Zimbabwe export platinum, there is limited regional capacity (in South Africa) to manufacture catalytic converters for the rest of the world. Mozambique is establishing itself as a major exporter of Liquid Petroleum Gas (LPG) over the next few years, and the trend is likely to be repeated. Angola, Botswana, Namibia, South Africa and Zimbabwe are all diamond producers.

There is "no market" for diamonds in the region which are thus exported to the conversion centres of India, Israel, United Arab Emirates and Belgium, all of which have invested heavily in the higher value-adding portions of the global diamonds value chain. The share of the continent in the world trade is also quite low (around three percent), and Africa's poor export diversification in terms of both products and destination renders the continent particularly vulnerable to external shocks.

However, Africa has started modifying its trade relationships over the last decade by escalating ties with emerging economies (China and India) at the expense of traditional partners. Analysis of trade patterns by the ITC (2012) fully supports this view. "A fast-paced reorientation of SSA exports towards fast-growing emerging markets is already under way, but this is concentrated currently on raw products in general, and oil in particular. Without any firm policy action, predicted future growth patterns will favour this trend."

In parallel, some African countries are also engaged in higher value-added trade, and some of the markets for transformed products are found within Africa itself. Infrastructure projects that support intra-African trade could therefore be beneficial to the establishment of processing industries. Projects that aim at simplifying customs procedures will bring slightly lower benefit, but will also be far less costly to implement.

Finally, bilateral initiatives that seek to facilitate African-Asian trade contain the risk of strongly favouring trade in primary products. Such initiatives, therefore, need to be accompanied by Asian investments into transformative industries in SSA in order to establish new supply chains between Asian manufacturers and their subsidiaries in Africa.

Continued strong growth in SSA exports to Asia is expected based on the current set of policies, but since these exports are likely to involve mostly unprocessed raw products, policymakers should focus on a policy mix that supports value-added exports towards fast-growing markets. Trade-related infrastructure projects and facilitated customs procedures on the African continent, combined with bilateral trade and investment agreements that have a development component, will likely support the tendency of some SSA countries to engage in the export of value-added products to Asia and beyond" (ITC, 2012:v)

Nevertheless, African countries face numerous trade-related constraints which strongly hinder trade within the continent and with the rest of the world. Non-tariff barriers and tariff escalation, which target processed goods are prime examples. While efforts must be made to address these challenges in the long run, over the short term, regional integration offers opportunities for expanding trade in manufactured goods, especially the establishment of the SADC Free Trade Area (FTA) and the COMESA-EAC-SADC Tripartite Free Trade Area (TFTA) approved in June 2015.

Currently, 60 percent of intra-regional trade comprises manufactured goods. Thus economic integration can lead to substantial economic and social benefits in terms of helping to address supply-side constraints, diversifying the productive base, ensuring economies

of scale for production, expanding markets and improving competitiveness and economic efficiency, furthering technology and knowledge transfer, and boosting investment.

For the SADC region, while the export growth rates have exceeded the annual targets, growth in product diversity and share of the manufacturing sector in total GDP beyond the average 13 percent has been elusive. Further, in spite of implementation of the Trade Protocol for the past 14 years including the establishment of the FTA in 2008, intra SADC trade has remained stuck at around 15 percent (SADC, 2012) of all trade against the RISDP target of 35 percent. This is despite the fact that some countries such as Malawi, Mozambique, Zambia and Zimbabwe, have high rates of trade with other SADC Member States. Intra-regional trade is dominated by manufactured goods, while extra-regional trade is dominated by crude materials and ores on the export side and manufactured and semi-finished products on the import side.

The apparent lack of response to trade liberalisation is a cause for concern for SADC because the opening of regional markets was viewed as an incentive to accelerate trade among SADC Member States. This concern is sometimes over-dramatized as there can be no hope of an escalation in intra-regional trade in the absence of economic transformation of the region. It is clear that market opening is necessary but not sufficient to ensure sustainable regional industrial sector growth.

The Member States need to have something to trade in and that can happen only if they increase the capability to add value to primary products or products in semi-worked forms. This notwithstanding, there is merit in taking more decisive measures to remove non-tariff barriers which are also acting as a significant constraint to increased intra-regional trade.

The RISDP was forthright in observing that “The (regional) industrial sector needs to withstand the challenges of globalisation, which range from competitiveness to industrial and product diversification, productivity, technology transfer and research and development. This can only be achieved with an overall improvement in productivity and competitiveness combined with a diversified and balanced industrial growth in a wider, well-linked economic space that allows for the efficient and effective use of factors of production on the basis of increased value addition” (RISDP, 2003:26).

Building competitive industries in a globalising world is not an easy task as technology is changing ever faster and faster with time, while market barriers are fast disappearing the world over. Meanwhile sources of finance for product research and development, always a difficult option for SMEs, has become much more elusive for southern African countries.

The crucial question that requires further investigation is whether or not it is a practical reality to expect SMEs in Lesotho, Malawi, Mozambique, Zimbabwe, etc., to hide behind the (falling) regional external tariff walls and hope to develop products that can successfully compete with much more efficient producers in the industrialized world and in emerging economies such as China, India and Brazil where economies of scale are difficult to match.

This question arises as backdrop to the fact that the region does not have a common external tariff and in any case member states already have tariff phase-down commitments under the World Trade Organisation (WTO) system. Could the identification of some niche products be the answer? Further research is required.

5.4 Role of COMESA-EAC-SADC Tripartite Free Trade Area

Meanwhile, deepening of trade integration within SADC has been hampered by the issue of multiple memberships of Regional Economic Communities (RECs). Some SADC Member States are members of the Southern African Customs Union (SACU) founded in 1910, while others belong to the Common Market for Eastern and Southern Africa (COMESA). Member States have been reluctant to belong to only one REC because of the potential loss of trade preferences, except for Mozambique which belongs only to SADC.

Therefore, the idea of bringing together SADC, COMESA and the East African Community (EAC) into a Tripartite Free Trade Area readily found favour among regional countries. This development is in line with the African Union plan in which the RECs are expected, through a series of consolidations, to build up into the African Economic Community (AEC).

African countries in the various regions have created RECs as a way of increasing intra-regional trade by reducing and eliminating tariffs and non-tariff barriers through trade liberalisation schemes. In 2012, during the 18th African Union Summit held in Addis Ababa, African Heads of State and Government endorsed an AU Action Plan for “Boosting Intra-African Trade and the Establishment of the Continental Free Trade Area”.

The TFTA was approved at a summit of leaders from the three RECs in June 2015, and the AU Heads of State and Government were due to launch negotiations for the Continental Free Trade Area around the same time. The objective of this decision is to further strengthen trade relations between African economies, with specific focus on activities for seven key priority clusters, namely trade policy, trade facilitation, productive capacity, trade-related infrastructure, trade finance, trade information and factor market integration.

The expectation is that such measures will play a part in increasing the share of intra-African trade over the next decade, from around 10-12 percent today to 20-25 percent by 2022. It is projected that the full removal of tariffs and non-tariff barriers within the continent will bring the share of manufactured output in intra-African trade to about 70 percent (UNECA 2013). The real measure of success of integration, however, is the rise in Africa’s contribution to global trade flows, especially the trade in manufactured items.

5.5 Implications for the Development of a SADC Industrialization Strategy

An issue which immediately arises is whether the prospects of creating a wider Free Trade Area does not dampen the enthusiasm to develop a fully functional industrialization strategy for the region. There is a real possibility of having half-baked implementation of strategies as a result of bureaucratic fatigue, much to the disadvantage of regional industrialization. That notwithstanding, there is reasonable synergy as far as industrialization is concerned. SADC Heads of State and Government stated their position on industrialization to guide to their negotiators within the context of the CFTA negotiations, and the Industrialization Strategy and Roadmap were approved at the April 2015 Summit.

Heads of State and Government moved with similar resolve to approve the TFTA in June 2015. Freeing trade is important for creating a wider market but, as already observed, without economic transformation in the three regions, there will not be much to trade, hence the call for a much more determined effort to industrialize the region and the continent.

The issue of institutional capacity within the Tripartite arrangement to facilitate trade by producers both large and small, while at the same time driving industrialization may prove to be a real challenge. The existing protocols have not benefited many small producers in a number of member states and the RECs have not yet developed mechanisms to change the situation. There is, therefore, an even bigger challenge with the widening of the free trade area. While value addition has become the buzzword, does the widening of borders in any way provide the basis upon which regional countries can industrialize? This is a complex but open question.

SADC’s industrialization programme, envisioned in the RISDP (2003), was given more expression in the SADC Industrial Upgrading and Modernisation Programme (IUMP) of 2009, and the SADC Industrial Development Policy Framework (2012) that prioritise the regional value chain approach to industrialization. This approach is also being pursued by SADC’s partners in the Tri-partite arrangement, the COMESA and EAC.

This is also an important part of the strategy being promoted by the African Union and development partners such as the African Development Bank (AfDB) and UNECA, as well as the ITC. For example, the development of Zimbabwe's Cotton-to-Clothing strategy with the support of COMESA, EU and ITC represents the beginning of a more serious approach to this value chain approach as the main driver of industrialization in the southern Africa region.

5.6 Adjusting Regional Trade Policy to Support Industrialization

The following paragraphs outline actions needed by various players at the SADC regional level and at the level of SADC Member States and development partners to push forward and support the industrialization agenda.

At regional level, SADC Member States must engage in negotiations aimed at the following:

- ♦ Modifying the trade protocol, especially rules of origin through the incorporation of Special and Differential Treatment in their application, recognising the different levels of development in particular between South Africa and the rest of SADC. Such intervention will lead to increased industrialization at different levels within the region while increasing the prospects for intra-regional trade.
- ♦ Pooling of resources to support technological acquisition and development of endogenous technologies.

The SADC Secretariat should facilitate regional actions as follows.

1. Enhancing Industrial Capacity

The regional institutional framework proposed in the SADC Industrial Development Policy Framework needs to be operationalised to drive the domestication of the policy and the commencement of specific activities. A deliberate programme aimed at enhancing capacity in industrial policy-making and implementation at both national and regional levels will be necessary. Measures that promote regional product value-chains in industrial development policies should be introduced in the policy frameworks.

2. Regional Pooling of Resources and Capacities

The region should pool resources to support the establishment of regional technology incubation centres or centres of excellence based on institutions that are already operational in some member states. These centres can specialise on identified areas of interest such as the technologies to produce new products from the various PGMs. Another centre could focus on jewellery manufacture, or pharmaceutical products, etc.

SADC, with the assistance of UNIDO, should invest in research into specific value chains and industrial clusters to help member states to make decisions on exploiting their comparative advantages. Such research would also enable regional cooperation through the participation of companies in member states in specific parts of regional value chains. SADC Member States should ensure that rules of origin promote the development of these regional value chains through the practical application of the cumulation principle.

3. Infrastructure Development

The development of efficient, integrated and cost-effective infrastructure is key for industrial development. The region is currently facing a deficit in the electricity sector despite the potential for the development of energy infrastructure. The SADC Regional Infrastructure Development Master Plan adopted in 2012 outlines strategies to address the regional infrastructure gap. Funding proposals for the various infrastructure projects identified in the Master Plan need to be pursued and the projects developed. Projects such as Inga III can address the regional power challenges.

The SADC Project Preparation and Development Facility (PPDF) which was designed to facilitate the preparation of bankable infrastructure projects should be further enhanced to have an arm that will deal with industrial project preparation. The Regional Development Fund (RDF) should help finance or organise financing of projects identified through the PPDF.

The development of infrastructure can also be done by the promotion of development corridors through the African Spatial Development Programme (SDP), consisting of a network of key development corridors across the continent to liberate resources and the associated economic potential. The SDP aims to synchronize infrastructure provision with users to enhance investment potential and to provide economic rigour for infrastructure investments. Development of infrastructure can be done through PPPs, such as Build Own and Operate or Build Own Operate and Transfer. The technical and economic feasibility of tapping into the vast renewable energy options should also be investigated.

4. Developing Regional Value Chain Strategies

The SADC regional industrialization thrust requires collaboration through the development of regional value chains and participation in global value chains. Member States have to identify where they fit in the regional and global value chains based on resource endowments, capabilities, capacities and skills. Furthermore, a decision has to be made on the value chain to fully develop, for example textiles, automotive sector or PGMs for the motor car industry.

For example, the cotton-to-textiles and the garment sector is an area in which some Member States have expertise to convert fabric to the finished products, despite lacking skills and technology in making yarn and fabric. Similarly, the South African automotive sector could offer opportunities for regional value chain development through the manufacture of components in neighbouring countries. The regional value chains would start with the simpler components and graduate to more complex parts, utilising regionally available materials over time.

The end product would have a market that encompasses the whole region. Once Member States have decided on value chains to pursue, the next stage would be technology acquisition and leveraging to provide both the source of raw materials and the initial market for the finished products.

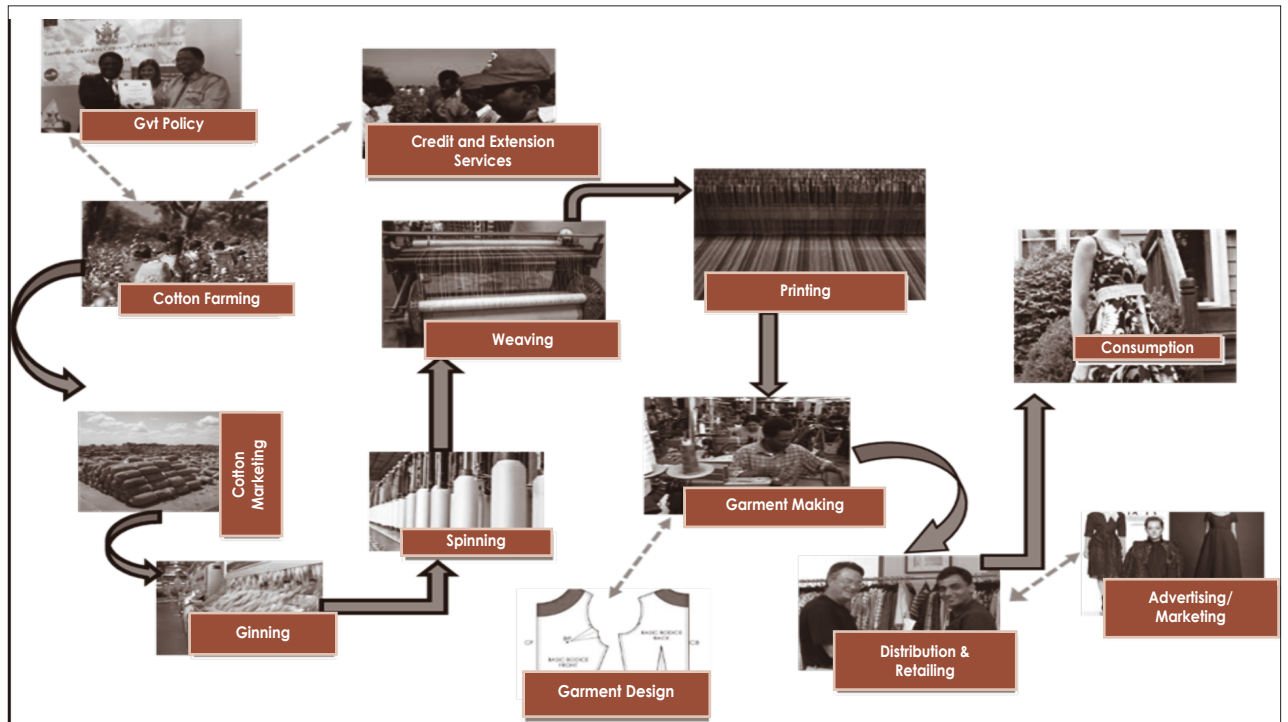
5. Deepening the SADC FTA

This can be used to lift many out of poverty if accompanied by appropriate regional industrialization policies and strategies. SADC should boldly put in abeyance the launch of the Customs Union as that may result in some countries continuing to lag behind. Instead, focus should be on transforming the Trade Protocol to become an enabler in the industrialization programme of the region. Some member states are finding it difficult to fully implement the tariff phase-down in line with the FTA requirements. It is, therefore, necessary that during intra-regional trade negotiations, policy space be created to enable countries lagging behind to develop industries to enable all member states to produce tradable goods.

The regional integration agenda is already being reformed to give prominence to factors that enhance regional production capacity and address other supply side constraints such as the high cost of services in the region. This includes the rules of origin referred to above which should be re-negotiated with a view to encouraging the set-up of industries in the less developed parts of SADC. It is clear from evidence on the ground that some of the products that are key to some SADC Member States, such as clothing and textiles, need a significant amount of time to transform from single transformation to double transformation. This does not take away the ideal double transformation as in the longrun the region stands to benefit more from it. This is particularly true of the cotton-based textiles sector as the region is an exporter of cotton fibres (Figure 8).

The cotton textile and clothing value-chain can be used to move many people out of poverty if handled properly. At the same time, RVCs which promote one part of the region and leave the rest anchored at the bottom of the value chain should be avoided. What is clear is that southern Africa must build required capacities and capabilities to add value to both primary and semi-worked products. The integration agenda of the COMESA-EAC-SADC Tripartite arrangement already includes an industrial development pillar which supports the development of agro-industrial and other industrial value chains.

Fig 8 Simplified Illustration of Cotton Value Chain



Trade negotiations with partners such as the EU, China and India should necessarily be handled at regional levels and be directed towards enhancing regional production capabilities in addition to market access issues. Already the region has witnessed the negative effects of negotiations with only part of the region (SADC 7) rather than with the whole. In view of this, South Africa must be dissuaded from negotiating directly with third countries without the rest of the region.

The effort that South Africa is putting into the Brazil, Russia, India, China and South Africa (BRICS) arrangement could be modified to become inclusive of regional partners as a relationship with other BRICS partners has the potential to transform the region. A more prosperous southern Africa offers positive long-term economic prospects for South Africa's economy as well.

As already noted above, technology is one of the key drivers for accelerated growth and economic transformation through its impact on productivity, competitiveness and incomes. Technological advancement and innovation can provide a platform for diversification and a shift from reliance on agriculture and exports of raw materials to manufacturing and exports of value added products. This shift has immense challenges.

However, in order to overcome challenges such as lack of adequate domestic and institutional policies in setting the general direction of the development, acquisition, adaptation, use and diffusion of new and emerging technologies, as well as limited human and financial resources and inadequate infrastructure for technology advancement, it is necessary to invest in quality education, skills development and entrepreneurship training and by encouraging joint ventures and industrial alliances between regional and foreign firms.

The complexity of such cooperation should not be underestimated, especially considering that relationships with foreign firms are often handled at individual firm level or at best at country level. That notwithstanding, the promotion of international science and technology cooperation agreements between SADC and leading or emerging technology exporters remains a key option.

6. INSTITUTIONAL SUPPORT AND FINANCING MECHANISM TO SUPPORT INDUSTRIALIZATION

6.1 Background to Financial Markets in Africa

The financial intermediation system is an important pillar of any industrialization strategy as it provides financial resources to support productive opportunities, thus enhancing production, investment and trading activities. The financial markets in Africa play an important role in supporting any industrialization initiatives on the continent. These markets can be divided into the banking system and the non-bank finance system. The depth of the banking system as measured by the deposits mobilised and credit extended tends to be low in Africa.

This is reflected by the low ratios of indicators which measure financial sector depth and development. Liabilities to GDP averages 32 percent in Africa compared to 49 percent in East Asia and the Pacific, and 100 percent in high-income countries. Private credit to GDP averages 18 percent in Africa, compared to 30 percent in South Asia, and 107 percent in high-income countries. South Africa, Mauritius and Seychelles are outliers as far as these indicators are concerned for the latter two, due to their status as offshore financial services centres. African banking systems are also characterised by a low level of financial intermediation and high interest rates.

The non-bank financial system has the securities market as one its components. Organised securities exchange markets in Africa are members of the African Securities Exchange Association (ASEA) with the largest being Johannesburg in South Africa. The non-bank finance system is also comprised of insurance, pension and collective savings institutions. There is also a market for term finance mainly in the form of short-term government paper.

6.2 Global Developments

Outside the African continent, a number of initiatives with the potential to affect trade and investment flows into the continent are taking shape in the world. There is the proposed free trade area between the EU and the USA. There is also the proposed Trans Pacific Partnership (TPP) regional regulatory and investment treaty being negotiated by 12 countries including Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States and Vietnam. These international partnerships have the potential to divert trade and investment from Africa including the SADC region. The partnerships also aim to harmonise standards at a much higher level which will have the impact of excluding products from poorer countries in Africa. The dynamics of negotiations within the framework of the WTO are likely to be affected as rules of engagement may be agreed in these forums which exclude the African countries.

The BRICS countries (Brazil, Russia, India, China, South Africa) have agreed to establish a New Development Bank (NDB) with initial capital of US\$50 billion and a Contingent Reserve Arrangement (CRA) supported by US\$100 billion of member countries' reserves (BRICS Summit in Brazil, 2014). The NDB is intended to provide support for the development of infrastructure and sustainable development projects and the CRA is intended to relieve liquidity pressures in times of crisis. It is anticipated that a significant number of clients for the NDB will be from sub-Saharan Africa which is facing a large deficit of finance for infrastructure projects.

6.3 Continental Initiatives Targeted at Financing Industrial Development

The African Union Commission has developed the Accelerated Industrial Development Action (AIDA) Plan as the basis for accelerating the growth of the industrial sec-

tor on the continent. The AIDA recognises underdeveloped financial markets as one of the reasons for the lack of industrial development on the continent. The AIDA has an inward focus which is targeted at making sure that Africa's industrialization is funded by Africans.

The African Development Bank hosts the African Financing Partnership (AFP), an initiative by like-minded Development Finance Institutions (DFIs) to provide project finance to private sector projects in Africa. The partners in this initiative which include two South African DFIs are:

- African Development Bank (AfDB)
- Deutsche Investitions Und Entwicklungsgesellschaft MBH (DEG)
- Development Bank of Southern Africa Ltd. (DBSA)
- European Investment Bank (EIB)
- Industrial Development Corporation of South Africa Ltd. (IDC)
- International Finance Corporation (IFC)
- Nederlandse Financierings Maatschappij Voor Ontwikkelingslanden NV (FMO)
- Société de Promotion et de Participation pour la Coopération Economique S.A. (PROPARCO).

The financing provided under the AFP window supports projects in the infrastructure sector (power, transport, ICT and water/sanitation); industrial sector (extractive, agribusiness) and healthcare sector; and financial institutions (African DFIs, banks, microfinance, guarantees).

The AfDB also supports the development of the bond market through the African Financial Markets Initiative (AFMI) which has two supporting pillars — the African Financial Markets Database which provides updated information on African local currency bond markets; and the African Domestic Bond Fund which is an index tracker fund that is intended to invest in local currency denominated sovereign bonds.

These facilities will be important in supporting the industrialization strategy for the SADC region.

A report by NEPAD and UNECA (2014) underscores the fact that Africa has the resources to potentially fund its own development, and reveals the following statistics:

- Africa generates more than US\$520 billion in domestic taxes annually;
- Africa earns more than US\$168 billion from minerals and mineral fuels annually;
- Africa's Diaspora remittances rose to more than US\$40 billion in 2012;
- Africa's stock market capitalisation rose from US\$300 billion in 1996 to US\$1.2 trillion in 2007;
- Africa's private equity market is worth about US\$30 billion; and
- Resource-rich African countries have established Sovereign Wealth and Stabilisation Funds. In 2014 a number of countries including Ghana, Kenya, Nigeria and Rwanda raised US\$10 billion by floating sovereign bonds.

These statistics go a long way in confirming that funding for Africa's development can indeed be sourced from the continent and a slice of these funds can be targeted at the development of the industrial sector.

6.4 The SADC Context

Within the context of SADC, GDP figures show a steady growth towards the US\$700 billion mark as shown on the graph in Figure 9.

Fig 9 SADC GDP, 2004-2013

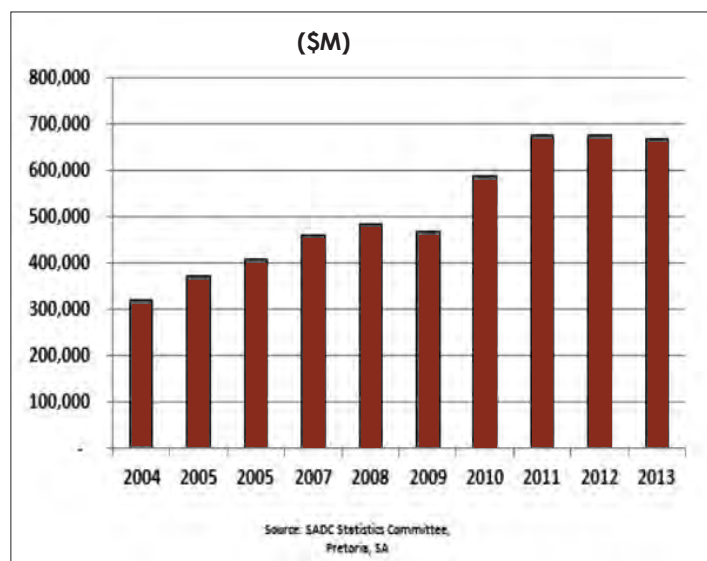
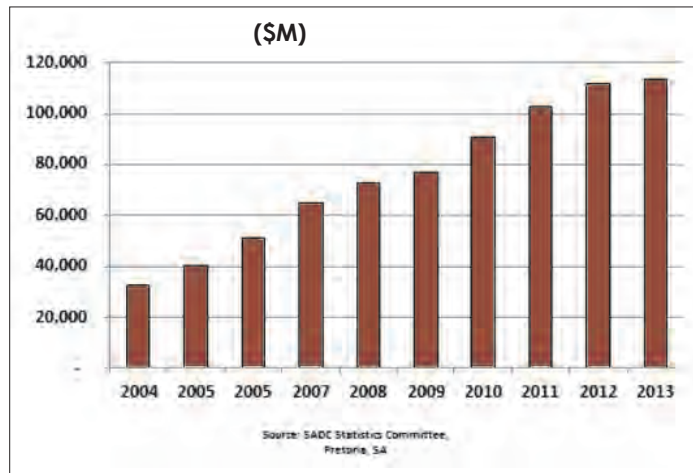


Fig 10 SADC International Reserves, 2004 -2013



The international reserves with the SADC countries have been on a steady increase as shown by the graph in Figure 10. There has already been debate as to how the region can leverage these reserves to fund infrastructure development.

The SADC Industrial Development Policy Framework recognises the role played by Development Finance Institutions (DFIs) in supporting industrial development but also notes the lack of support to this effect. Most of the DFIs in the region have an inward orientation (domestic/local) and they do not support projects at a regional level. The SADC IDP Framework emphasises the need for industrial financing mechanisms that have a bias towards the promotion of cross-border industrial linkages as well as supporting the needs of the SMEs.

The Framework notes that most of the development assistance received in the region is targeted at the social sector.

In 2003 SADC established the SADC Development Finance Resource Centre (SADC DFRC) to assist Member States in strengthening DFIs in the region by enhancing their capacity to deliver on their mandates and contributing towards the regional development efforts. The operating budget of the SADC DFRC is funded by contributions from SADC DFI Network members, while the work programmes in the areas of research and advisory services, SMEs, infrastructure/PPPs and capacity building are funded through cooperating partners.

The SADC DFIs Network currently comprises 32 members from 13 SADC Member States. The key focal areas of the SADC DFRC activities are:

- Financial sector reforms and strengthening, and capital markets development;
- Institutional support, encompassing capacity-building;
- SME development and support; and,
- Infrastructure/ PPP delivery.

SADC Member States have agreed to establish a SADC Development Fund which will operate under the auspices of the SADC DFRC. The SADC Development Fund will be resourced with funding from Member States, the private sector and cooperating partners. Its main target will be to create a pool of long-term finance for DFIs in the region which will be used mainly to finance infrastructure projects.

The SADC has a Committee of Treasury Officials which looks after fiscal issues and the Committee of Central Bank Governors (CCBG) which attends to monetary policy issues affecting the Member States. The CCBG deals with the development of financial institutions and markets, co-operation regarding international and regional financial relations, and monetary, investment and foreign exchange policies. All these aspects are important for harnessing financial resources which can go towards the funding of industrial development in the region. The CCBG is coordinated by South Africa which hosts its Secretariat.

Capital markets are an integral part of SADC's efforts at providing finance for infrastructural and industrial development. The SADC Protocol on Finance and Investment was established in 2006. The protocol is intended to facilitate the expansion of capital markets and regulating regional stock exchanges. The Committee of SADC Stock Exchanges (CoSSE) which is supported by the Johannesburg Stock Exchange was established in 1997. The Committee of Insurance, Securities and Non-banking Financial Authorities was set up in 1998 to implement a harmonised, risk-based regulatory framework in capital markets while mitigating risk and protecting consumers.

Figure 11 illustrates the major sources of finance for industrial development in the region.

The government funding for industrial activity is through direct investment in quasi-government institutions. Most governments in the region have been privatizing state-owned enterprises to allow them to focus more on providing a supportive fiscal environment that encourages investment in industrial projects and that is also supportive of venture capital investments. Lack of funding has curtailed new investment in the industrial activity by the private sector.

The local banking sector in most SADC Member States are not well capitalised to give them the capacity to support the industrialization effort. The depth of capital markets in most of the region is also shallow and there is need to encourage policies that are geared towards the development of capital markets focusing on industrial bonds and commercial paper. Non-banking sector players such as insurance and pension funds can also be a vital cog on driving this part of the financial markets.

The major source of funding for industrial projects in the region comes from DFIs. The typical products offered by these institutions include:

- Medium and long term loans with maturity profiles varying between 3 and 12 years;
- Trade finance;
- Equity investments;
- Lease finance; and,
- Property development funding.

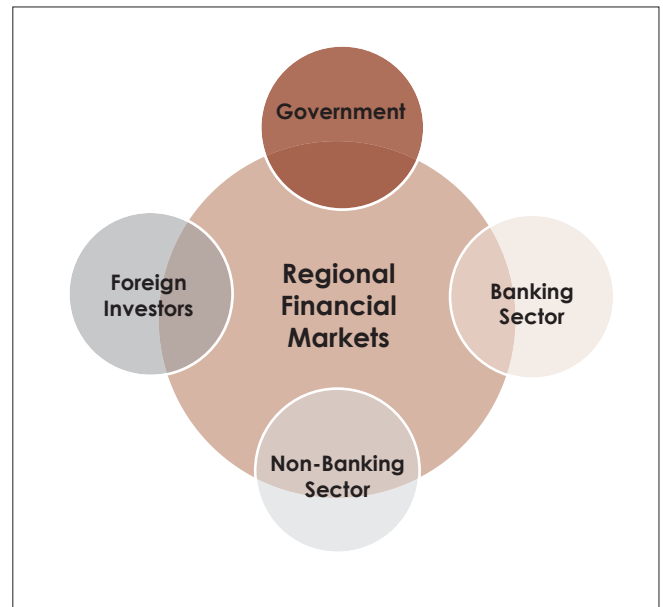
6.5 South Africa's Position in the Regional Financial Markets

South Africa is a dominant player in the financial markets in Africa. The country has a world-class financial sector which has strong capital resources, technology and infrastructure, and a strong regulatory and supervisory environment. The World Economic Forum (WEF) Global Competitiveness Report 2013/14 ranked South Africa third out of 148 countries for financial markets development. A number of foreign banks have established branches or representative offices in South Africa and others have acquired stakes in local banks.

South Africa is also a major player in the Africa's FDI market. In his Budget Speech for 2014, the South African Minister of Finance indicated plans to further ease tax and foreign exchange frameworks for companies investing in the rest of the African continent. The South African Treasury estimates that South Africa's investment in Africa is more than R36 billion which makes it one of the top two developing country investors on the continent. A 2013 report by FDI Intelligence notes an increase of more than 500 percent in project activity by South African companies in cross-border investments within the continent. Most of this project activity is in the financial (Standard Bank), retail (Shoprite), and telecommunication (MTN) sectors.

Some project-related activities are also in the consumer product sub-sectors such as beverages, food and tobacco, and to a lesser extent the resource-related sector. The profile of project activity emphasises the fact that most of the investments by South African companies into Africa are looking at expanding markets. This FDI should be balanced with more investments directed towards industrialization of the region.

Fig 11 The Main Actors in Financial Markets



A report commissioned by the NEDLAC Fund for Research into Industrial Development, Growth and Equity (FRIDGE), revealed that the SACU region has the greatest concentration of South African companies followed by the SADC region, with key markets in East and West Africa and limited investments in North Africa. Top destinations for South African FDI in the continent are Nigeria, Ghana, Namibia, Zambia, Angola, Kenya and Mozambique. These markets are favoured because of their high growth, high opportunity, relative sophistication, regional importance and resource richness among other factors.

South Africa's IDC is an example of a DFI which has grown and matured, and is offering its services beyond the borders of South Africa as shown in the summary of its business profile in Table 8.

The IDC provides funding for industrial development in South Africa and the continent, and also provides support to other DFIs in the region and implements regional projects through collaborative efforts with local partners.

The Development Bank of Southern Africa (DBSA) is another DFI wholly owned by the South African Government which provides funding for domestic and regional projects. The DBSA hosts a number of financing platforms in this regard:

- The SADC Project Preparation and Development Facility (PPDF) which is intended to assist SADC in the implementation of the SADC Regional Infrastructure Development Master Plan (RIDMP) with focus on regional projects in the energy, transport, water resources, and ICT sectors.

Table 8 Business Profile of the Industrial Development Corporation of South Africa

Activities	Customers	Business Life Cycle	Sectoral Involvement	Funding Products	Regional Involvement
Provision of development finance	Business Government Other DFIs	Conceptual Pre-feasibility	Agricultural value-add	General debt	South Africa
Project development		Feasibility Establishment	Mining and mineral Beneficiation Manufacturing	Quasi-equity Equity Export/import finance	Rest of Africa
Research and policy inputs		Product commercialisation	Green industries	Short-term	Global imports of South African equipment
Fund management		Expansion	Industrial infrastructure	Trade finance Bridging finance	
Non-financial forms of business support		Mature	Tourism	Guarantees	
Capacity building			ICT Media and motion pictures	Venture capital	
			Healthcare	Wholesale funding through intermediaries	

- The Pan African Capacity Building Programme (PACBP) which is run in partnership with the IDC and Agence Française de Développement, a French development organisation. The programme focuses on building capacity for infrastructure development through regional DFIs, government departments, semi-government institutions, and other development stakeholders in sub-Saharan Africa.
- Two domestic programmes — the Infrastructure Investment Programme for South Africa (IIPSA) and the Green Fund.

South Africa's sixth annual Industrial Policy Action Plan (IPAP 2014/15 – 2016/17) emphasises the importance of regional integration to the economy and points to investment in the development of regional infrastructure and projects that promote regional value chains as vital to the attainment of sustainable growth in the region.

6.6 Options for Funding Industrial Development in the SADC region

The review of financial markets in Africa and the extent to which they are developed shows that there is scope to use existing financing mechanisms to fund industrial development in the SADC region. There is also scope to develop new mechanisms that take into account the potential within the Member States and SADC regional economy. We present below what we believe are the key financing mechanisms and approaches that need to be developed if SADC is to take ownership of the process of industrial development in the region.

♦ SADC Development Fund

The SADC Development Fund will be a key source of funding for industrial development and related infrastructural projects in the region. It is, thus, imperative that modalities to operationalise the fund are put in place as a matter of urgency. The current consensus is that SADC Member States will own 51 percent of the fund, with private sector owning 37 percent and cooperating partners owning 12 percent. The fund is envisaged to start with seed capital of US\$1.2 billion. This amount is insignificant compared to the requirements in the region for infrastructure finance. Therefore, other capital-raising mechanisms must be put in place to ensure that the fund is capitalised to an extent that will allow it to meet its intended objectives. The target in the long term is for the fund to be transformed into a regional DFI for the SADC region.

♦ Prescribed Budget Allocation to Finance Industrial Development

One possibility for governments in the SADC region to show their commitment to industrial development is to set aside a percentage of national budgets to finance industrial development at the regional, national and local levels. After a regional policy decision is taken in this regard, fiscal economists would need to ensure that appropriate budget allocation targets towards funding industrial development are set in line with the overall regional macroeconomic framework and peculiar conditions in each Member State.

The prescribed budget allocation model would be similar to the 2003 Maputo Declaration on Agriculture and Food Security in Africa in which the Heads of State and Government of the AU agreed to a “commitment to the allocation of at least 10 percent of national budgetary resources to agriculture and rural development policy implementation within five years” (AU, 2003)

The framework for a prescribed budget allocation to finance industrial development needs to be backed by an appropriate tax and foreign exchange regime that is supportive to industrial development and is part of an incentives package targeting expansion of the industrial sector.

♦ Enhancing South-South Cooperation

Following the High-level UN Conference on South-South Cooperation held in Nairobi, Kenya, in 2009, the support by governments, regional entities and UN agen-

cies has been increasing for implementation of South-South and Triangular cooperation. UNIDO has taken the role of a global convener on South-South cooperation and has been supporting South-South technical cooperation projects and promoting South-South platforms, networks and partnerships. South-South cooperation initiatives supported by UNIDO include the Industrial Knowledge Bank (IKB)/ *Banco de Conocimiento Industrial* (BCI) which is targeted at promoting the exchange of knowledge and expertise on industrial development; the Networks for Prosperity (N4P) which is targeted at creating a global management system for the development of the private sector; and the 3ADI targeting sustainable reduction in poverty and hunger on the continent.

SADC Member States need to take advantage of these efforts targeted at increasing the volume of South-South trade, foreign direct investment, technology transfer and sharing of solutions and experts to ensure that they are used to full advantage in the development of regional industrial development strategy and requisite financing mechanisms.

China is one of the countries in the South that has invested significant funds into the development of infrastructure in Africa and the extraction and processing of natural resources. The fifth Ministerial meeting of the Forum on China-Africa Cooperation (FOCAC) was held in Beijing in 2012 under the Theme: "Build on past achievements and open up new prospects for the new type of China-Africa strategic partnership." This theme opened up to the possibility of extending China's interest in Africa to the area of industrial development beyond the areas covered thus far. It is up to the SADC region to take up the challenge and explore ways of getting more investment from China into industrial development.

♦ A Value Chain Approach

The WB and other development partners have developed an integrated approach for managing the full Extractive Industry value chain which is comprised of awarding contracts and licenses, monitoring operations, enforcing environmental protection and social mitigation requirements, collecting taxes, distributing revenue in a sound manner, and implementing sustainable development policies and projects. This approach provides a learning experience for the region in the implementation of a value chain approach to financing industrial development.

The SADC region is rich in mineral and agricultural resources. It makes sense for the region to capitalise on these resources to ensure that development is based on taking all opportunities along the value chain from natural resource extraction and agro-industry to manufacturing and marketing of finished products. There are different models of value chain development. The value chain can be driven by the primary producer, the buyer (processors, exporters or traders), a facilitator (such as an NGO or government organisation), or it can be an integrated model led by a multinational company.

Value chain financing can be provided in two forms which are:

- Internal value chain finance which takes place within the value chain such as when an input supplier provides credit to a farmer, or when a lead firm advances funds to a market intermediary within an agricultural value chain; or
- External value chain finance which is made possible by value chain relationships and mechanisms like in a case when a bank issues a loan to farmers based on a contract with a trusted buyer or a warehouse receipt from a recognised storage facility.

Funding for industrial development in other sectors can also be looked at from the value chain perspective of how linkages in the chain can be used for the benefit of the whole chain. This can be achieved through intermediate funding from a third party to the client in the chain. In some cases, the mere fact of being within a value chain may be sufficient for the chain actor to obtain funding from financial organisations.

6.7 Enhancing the Existing Funding Mechanism

Options that must be pursued to enhance existing funding mechanisms include:

- In the more mature markets in the region Pension/Mutual Funds, Sovereign Wealth Funds (in the case of mineral-rich countries) and Insurance Funds can potentially be good sources of domestic funding for industrial development;
- There is room to develop long-term local Capital Markets, which include government and non-government bond markets and equity markets. New instruments, such as Diaspora Bonds and Commodity-Linked Bonds, are already in use; and
- Domestic Stock Markets can also be strengthened to absorb large Initial Public Offerings (IPOs) of shares in order to increase availability of long-term financing.

6.8 Financing of MSMEs

The majority of banks shy away from funding MSMEs as they are seen as high-risk investments. This has resulted in the proliferation of microfinance institutions which are coming to fill an intermediation vacuum. The Microfinance Information Exchange (MIX) estimates that more than 120 million families in the world are recipients of microloans.

A segment of the MSME sector that is significant for industrialization is the Small and Medium-scale Industries (SMIs.) These are a group of SMEs that specialise in high-value industries such as mining and manufacturing. The IFC estimates that SMIs contribute about 45 percent of manufacturing employment and 29 per cent of manufacturing GDP in developing countries, compared to 67 per cent and 49 per cent in industrialized countries.

Microfinance credit available to the SMEs sector is not suitable for SMIs as its focus is on short-term loans for working capital requirements and SMIs require investment in plant and machinery. There is need to transform the current arrangements for funding of SMEs in the SADC region by:

- Creating more specialised financial institutions which understand the needs of the MSME sector;
- Creating hybrid capital mechanism for financing MSMEs;
- Developing alternative stock markets which are more suitable to the needs of MSMEs;
- Developing cluster models for raising funding which build greater confidence between lenders and MSMEs based on provision of collective guarantees to financial institutions; and
- Provision of specialised lines of credit targeting the MSME sector.

6.9 Institutional Support Mechanisms

The SADC Industrial Development Policy Framework acknowledges the following institutions as being important to the support of the industrialization strategy:

- The SADC Stakeholders Forum on Industrialization comprises government officials, the private sector and industry experts;
- The SADC Committee of Ministers Responsible for Industry Matters which oversees implementation and provides policy guidance;
- The Committee of Senior Officials Responsible for Industry Matters which provides technical policy support to the Committee of Ministers;
- The Industrial Development Forum (IDF) which technically is responsible for the elaboration of regional industrial development strategies and action plans; and
- The SADC Secretariat which coordinates and supports implementation of agreed strategic intervention areas and action plans.

The institutional framework highlighted above takes account of existing SADC structures. For the effective coordination of the regional industrialization strategy, the identified institutions will need to have coordinated work programmes run by dedicated and skilled manpower.

7. MAPPING AN INDICATIVE SADC INDUSTRIAL ROADMAP

7.1 Key Signposts

The Conclusion based on this Paper is that economic transformation for the region is feasible in the medium- to long-term, if an appropriate Industrialization Roadmap is developed to translate what the AU has set itself to achieve as a building block towards establishing an African Economic Community. The Paper proffers interesting information on what drives industrialization, and then makes observations on what could be the indicative entry points for the development of a regional Industrialization Roadmap.

The key message coming from the Papers informed by the economic sectors covered is that any meaningful structural transformation must be inclusive, and aim for full exploitation of local resources. It must also fully mainstream gender to ensure completeness, so as to maximize industrial development outcomes. That also ensures that society across the SADC regional space is pushed towards a sustainable human development path. The Paper has also shown that the regional economies are fraught with post-independence economic structural challenges that have persisted to the present day, and failed to break the dual structure that thrived during the pre-independence era.

That structure is defined by the co-existence of a small formal economy, and a huge informal economy (non-formal) which exceeds 60 percent in most countries. This non-formal sector apparently plays habitat to most of the MSMEs, and other marginalised groups of society. Unless the industrialization policy addresses this structural deficiency, the SADC region would have missed an opportunity to stem poverty and hence address inequality in the accumulation and distribution of regional wealth.

7.1.1 How do we Address this Dichotomy Rooted in the Political Economy of Development?

This requires an approach that accommodates a reform of the current property systems (legal and regulatory systems that ascribes property title to asset classes such as land, human capital, etc.) that have excluded the informal sector from engaging with the central capital systems of the formal sector. These titles are assets that are tradable and can be used to access capital.

Political will is required – this approach will unleash a collective and inclusive expansion of the asset base of the poor, marginalised, and the MSMEs segments of our regional populace and reverse the entrenched poverty in the sub-region.

This approach would also require a re-definition of the **role of the State**, towards a **Developmental Mode**⁵, not a bystander as prescribed under neo-classical economics. This neo-liberalism is what accounted for the Global Financial Crisis, yet post the crisis, taxpayers' resources were deployed to expunge the huge systemic risks, and financial and economic meltdown that characterized the aftermath of the Global Financial and Economic Crisis.

⁵ A Developmental State is premised on the adoption of a new macroeconomic framework towards a more endogenously driven economic development strategy that overcomes the constraints of the current dual enclave economies that have of consequence relegated MSMEs to the fringes of economies at the expense of a small formal economy that is, less integrated with the rest of the economy. The new approach must create linkages between economic sectors and break the continued marginalisation experienced by workers and operators in the informal economy and communal subsistence economy" (Kanyenze and Jauch, 2011).

7.1.2 What should then be Focus for the Region?

Building on the African Union's plan for Accelerated Industrial Development of Africa (AIDA), there is need for the SADC region to craft and roll out an industrialization strategy that will unleash the economic potential for the region. This will have the potential to boost the region's integration into the global trading system. This structural transformation across the sectors identified (Agriculture, Manufacturing and Mining), and based on an **integrated regional value chain approach** can have a profound effect on boosting national, and regional incomes. Through building regional chains, integrating into global value chains becomes possible.

Beneficiation and value addition of natural resources will boost revenue streams from the abundant natural resource endowment of the region, and hence anchor the region for a sustainable human development path. This will reverse the current resource rents leakages through illicit financial transfers, afford regional economies some insulation from cyclical commodity price movements given production on a higher value chain, and facilitate the export of processed goods.

This has to take a broad-based, inclusive development model that harnesses the entire populace to reduce the dualistic economies inherited upon independence in the sub-region that have entrenched economic disequilibria across countries, and hence worsened income disparities and poverty. Such a model will foster the integration of SMEs and the informal sector into mainstream economies. It will be important for such a growth model to assign the government a **Developmental State Role**, while the private sector must be facilitated to have a predictable business operating regime that supports innovation and capital accumulation.

The Paper could benefit immensely from the execution of a major Survey on a country-by-country basis throughout SADC to assess critically the subject matter, and hence complement the current output. The following Signposts, therefore, though not exhaustive, and given that they have been informed by desk research at this stage serve only as a starting point for a bigger investigation. However, the indicative findings are plausible and supported by the development literature and this can suffice to provide some guiding frame for the development and implementation of a regional industrialization agenda for SADC.

The tenure of the SADC Industrialization Roadmap should be aligned to the remainder of the revised RISDP implementation timeframe (2015-2020). The following could suffice as action items under the proposed Roadmap.

7.2 Short Term Trajectory

Short Term stock-taking of national production/value chains is needed to establish complementarity or otherwise, so as to identify competitive and comparative advantages. This will map entry points for specific commodity value chain development initiatives regionally. This will also provide indications on current industrial capacities, and potential thereof across the region.

- ◆ Map all business constraints and related factors that may inhibit or hinder value chain development in the region. Develop appropriate programmes to improve the business operating environment. Develop a credible Regional Investment Framework to facilitate investment and financing of the Regional Value Chain production systems.
- ◆ Prioritise sectors that can provide quick wins for implementation in the short-term, while deferring for appropriate staggered implementation for those requiring longer gestation.

- ◆ Develop a Time Bound Implementation Programme that ties Member States to contribute specific deliverables on the regional integrated value chain production function to facilitate take-off.
- ◆ Re-organize and re-orient and re-align domestic and regional industrial/ investment support institutions to support the regional industrialization initiative.
- ◆ Identify appropriate safeguard measures to cushion those that may be negatively affected by the industrialization programmes, based on principles of variable geometry. Compensation measures should be developed to fully remunerate injury to ensure equity in the development agenda.
- ◆ Infrastructure development – Regional Value Chain-related production/ industrial hubs, ports, harbours, rail networks, air, roads, energy, etc. Create the necessary funding structures to attract resources into these key investment areas.
- ◆ Taking advantage of TFTA negotiations, SADC could review the Rules of Origin to facilitate industrialization in the sub-region.
- ◆ In order to fully appreciate the current state of play of financing mechanisms within the SADC region there is need for an assessment of the current state of affairs in the region to generate baseline information that will assist in the development of a robust framework for financing of industrial projects in the region. This could be done through:
 - Undertaking a mapping exercise to identify institutions involved in financial intermediation in the region with a focus on medium-to-long-term funding and sector-specific facilities;
 - Assessing the products on offer and their relevance to financing of industrial projects.

7.3 Medium to Long Term

- ◆ Roll out Regional Industrialization drive
- ◆ Continuously review and adapt the Programme to accommodate changed regional circumstances and global market trends. Create a feedback system that allows timely analysis and adjustment of the Programme to maximize on emerging regional and global production, and market opportunities.

ANNEXES

Annex 1 SADC Member States Total Area and Population Density, 2000 - 2011

Country	Total Area (sq km)	Population Density (Persons per sq km)											
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Angola	1 246 700	10.7	11.1	11.4	11.8	12.1	12.4	12.7	13.1	13.1	13.5	14.0	14.4
Botswana	581 730	2.8	2.8	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2
DRC	2 345 409	22.2	23.0	23.7	24.6	25.4	26.3	27.1	28.1	29.0	30.0	31.0	32.1
Lesotho	30 355	61.5	61.5	61.6	61.6	61.7	61.8	61.8	61.9	62.1	62.2	62.3	62.5
Madagascar	587 041	25.9	26.7	27.5	28.3	29.1	29.9	30.7	31.6	32.5	33.4	34.3;	35.3
Malawi	94 276	111.1	114.7	118.5	122.5	126.6	130.9	135.3	139.9	138.7	143.4	147.9	152.6
Mauritius	2 040	581.9	588.3	593.4	599.6	604.7	609.6	614.2	618.0	622.0	625.2	628.0	630.6
Mozambique	799 380	21.6	22.1	22.6	23.2	23.7	24.3	24.9	25.8	26.5	27.3	28.0	28.8
Namibia	825 615	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.5
Seychelles	457	177.7	177.8	183.4	181.3	180.6	181.5	185.3	186.2	190.4	191.2	196.6	191.5
South Africa	1 220 813	34.7	36.9	37.4	37.9	38.3	38.8	39.2	39.7	40.1	40.6	40.9	41.4
Swaziland	17 364	57.8	59.3	60.8	62.3	63.6	58.2	58.5	58.6	59.4	60.1	60.8	61.5
Tanzania	885 803	33.8	34.8	38.9	39.4	40.6	41.9	43.2	44.5	45.9	47.3	48.8	50.2
Zambia	752 612	13.1	13.4	13.8	14.3	14.7	15.2	15.7	16.2	16.6	17.1	17.4	17.4
Zimbabwe	390 757	29.9	29.9	29.8	30.1	30.7	30.3	30.7	30.8	31.0	31.3	31.6	32.6
SADC – Total	9 864 742	21.5	22.2	22.7	23.3	23.9	24.4	25.0	25.6	26.2	26.9	27.6	28.5

Derived from SADC Selected Indicators 5 July 2012: Angola; Botswana (2000-2010), Democratic Republic of Congo; Lesotho (2000-2005); South Africa (2010), Seychelles (2000), South Africa, 2000), Swaziland (2001-2010), Zimbabwe; Statistics Botswana (2011); Lesotho Bureau of Statistics (2006 - 2011) - 2006 population Census & 2006-2026 Population projections; Malawi National Statistical Office; Statistics Mauritius (2001 - 2009); Mozambique *Instituto Nacional de Estatística* (INE); Namibia Statistics Agency (NSA) - Figure for 2011 is from the Namibia 2011 Census preliminary results; Seychelles National Statistics Bureau (2001-2011); Statistics South Africa (2001-2009 & 2011); Swaziland Central Statistics Office (2011); United Republic of Tanzania, National Bureau of Statistics (NBS); Zambia, Central Statistics Office

ANNEX 2

Speech Delivered by His Excellency Bard Hopland, Ambassador of Norway to The Republic of Zimbabwe, on Some Perspectives on Industrialization in Norway

Southern African Research and Documentation Centre (SARDC),
Harare, Zimbabwe
25 March 2015

Thank you for inviting me to address this important workshop. To establish a strategy for industrial transformation in SADC is a challenging task, but worthy and rewarding if you succeed. I am pleased that you have taken on this task, and proud that the Norwegian embassy can associate itself with the work you are doing.

I am not an economist, but my daughter is, and when I attempt to discuss economic issues with her, she keeps on reminding me that I have to make up my mind, whether I want simple answers to my questions, or useful ones.

Because, she says, in economic matters you cannot have both. I know that you are not shying away from trying to give the useful answers, but maybe also be aware that answers have to be simple enough for politicians allowing them to understand, support and buy into the strategies. After all they are responsible for the implementation of the strategies.

I have been foolish enough to accept the invitation to say something brief about perspectives of industrialization in Norway in 15 minutes. I do not know, but it must be like taking a PhD in 3 months, so I must ask you to bear with me.

I can only highlight a few issues. And a second warning: I am of course not saying that what was important for us more than 100 years ago, is relevant for you Here and Today.

Just one or two examples — Norway was lucky to have natural resources which had to be “industrialized on the spot” due to the economy of transportation at the time. Raw timber had to be made into dried plank before export to England.

Another example — When hydropower became our main comparative advantage due to an abundance of waterfalls, but available technology could not secure transmission of electricity through grids without considerable loss of electric power, the industrial plants were simply built under the waterfalls instead.

I hope you forgive me if I spend a minute on the indigenization issue. Norway would be the first to support the political idea that natural resources of a country belong to the people of that country.

We have on our side struggled with this issue both during the development of our hydropower resources, and later after oil and gas was discovered on the Norwegian continental shelf. We have made our mistakes, but I think most people will say that we now have managed to strike the balance between national ownership and control on the one side, and securing sufficiently attractive business propositions for private and foreign investors.

We have actively promoted foreign investment which not only came for the natural resources, but rather to work their way into Norwegian and regional markets with a view to contribute to economic diversity, clusters, linkages, higher wages and bringing in technology which spreads.

And it has been a deliberate policy since the first exploration concession was granted, that foreign companies had to accept to transfer knowhow and technology to Norwegian industrial partners and research institutions. Through such cooperation Norway has now built a world class offshore and sub-sea industry.

Let me briefly revert to my daughter. I am sceptical, but she is maintaining that there are three main ingredients in capitalism: the entrepreneur, the modern state and the system of technological innovation.

Well, let us for a minute look at the role of the entrepreneur. Important, yes, but I think that the foundation for any economic system is a healthy and well-educated population from which both entrepreneurs and workforce are drawn.

And now I can prove this! The Norwegian Ministry of Finance made a calculation two years ago of our total Norwegian national wealth. And listen to this... 10% was attributed to oil and gas. 80% was made up of our human resources. The heads and hearts of the Norwegian people had eight times more worth than our oil. And I do not need to remind you about the fact that half of any country's human resources are women.

Another important feature of Norwegian industrialization, could, however, be more relevant for you today. Norway had natural resources which were complimentary to each other. Timber from forests was floated on rivers to sawmill at the coast where Norwegian vessels exported the goods to Europe.

A typical cluster of industries which is a valid concept also today.

Ladies and gentlemen,

If I should briefly start with the beginning of the industrialization process in Norway, I have to start with agriculture, as is the case in most countries, I guess. Following modernization and mechanization of the agricultural sector, an increasing part of the rural population moved to the cities. Cities grew, trade started and an increasing work force was made available for emerging industries, primarily based on natural resources or economic activities where Norway had a comparative advantage or already a tradition.

However, important agriculture is for a vast number of reasons, also as a foundation for food processing industries, I think it is fair to say that agriculture alone will not get you rich. Only manufacturing can do that. And the manufacturing sector really solved three policy problems for Norway in one go when it was established: It increased considerably the national value addition (and GDP, it increased employment and solved our balance of payment problems.

Establishing a diverse manufacturing industrial basis is not easy. I would say that in our experience, it requires targeted support and levels of protection during the infantile period.

It is interesting to note that economic scholars in Norway around 1900 argued frenetically in favour of free trade, but with one exception; not free trade between Norway and Sweden because that would have led to deindustrialization in Norway. But this has been the case everywhere.

Even today in WTO many countries support the notion of “Free trade were its suits us”. Norway is partly also on this line. Our positions in WTO on fisheries and agriculture are very difficult to reconcile, to put it diplomatically.

But I also think that targeted measures must be temporary and limited, and a clear exit strategy is essential. Tax breaks, cheap credit or export bounties cannot stay forever if you want a sustainable and sound industry in the long run.

Let me also mention the obvious; early industrialization in Norway, like any other place, was about energy and infrastructure. We developed our hydropower potential and we built railroads and harbours for our shipping industry.

When we built the railroad between Oslo and Bergen, the cost was comparable at the time with a full annual national budget.

This leads me to another baby of mine. Most people seem to believe that Norway became rich when we discovered oil in the late 1960s. It is partly true, but not accurate. Norway actually became rich when women left the kitchens and joined the workforce during the 1950s and early 1960s.

But back to definition of capitalism, the modern state is one pillar. Yes, absolutely, but what does it entail? If you define a modern state as effective, accountable, transparent, with a firm rule of law, trust between Government and those governed and corruption-free, then I feel we have a more helpful understanding of the concept of a modern state.

Let me also say a few words on the future of Norwegian industrialization. For this is a continuous process.

From history we know about thousands of rise and falls of industries. The oil came as a blessing to us, but one day it is over, and we have to understand that and prepare. There is a discussion going on what should be the next pillar of the Norwegian economy.

And the issues are the same: What are our comparative advantages? What can we do better than anyone else? How can we secure maximum value from our natural resources? What kind of expertise and education system should we focus on? And so on.

Now, I am really at loss of how I shall conclude. Maybe to say that the links between industrialization and the good society are many and complex. These include:

- to get the property rights right;
- to get the institutions right;
- to get prices right;
- to get governance right;
- to get competitiveness and innovation right;
- to get entrepreneurship right;
- to get education and health services right;
- to get the investment climate right;
- even get culture right
- but most of all it is about getting the economic activities right.

I wish you a productive workshop, and I really hope that the document you are finalizing will become a helpful contribution to the deliberations within SADC on how to promote sound economic activities for the benefit of the people in the region, and in particular for all those young people who desperately need a job.

I thank you for your attention.

Annex 3

Structure of Production, 1980-2010 for SADC Countries and Comparators

(DGP shares, value added in agriculture, industry, manufacturing and services)

COUNTRY	1980				1990				2000				2010			
	AGR	IND	MAN	SER	AGR	IND	MAN	SER	AGR	IND	MAN	SER	AGR	IND	MAN	SER
Angola					18	41	5	41	6	72	3	22	10	60	6	30
Botswana	15	51	5	35	5	61	5	34	3	53	5	45	2	45	4	52
DRC	27	35	15	38	31	29	11	40	50	20	5	30	43*	24*	5*	33*
Lesotho	25	27	8	49	25	34	15	41	12	32	14	56	9	32	13	60
Madagascar	30	16		54	29	13	11	59	29	14	12	57	29*	16*	14*	55*
Malawi	44	23	14	34	45	29	19	26	40	18	13	43	31*	16*	10*	53*
Mauritius	13	26	16	61	13	33	24	54	7	31	23	62	4	27	18	69
Mozambique	37	34		28	37	18	10	44	24	25	12	51	32	23	13	45
Namibia	11	56	9	33	12	38	14	50	12	28	13	60	8	20	8	73
Seychelles	7	16	7	78	5	16	10	79	3	29	19	68	2*	18*	11*	80*
South Africa	6	48	22	45	5	40	24	55	3	32	19	65	2	31	15	67
Swaziland	23	30	21	47	10	43	37	46	12	44	39	44	8	47	42	45
Tanzania					46	18	9	36	33	19	9	47	28	25	10	46
Zambia	15	42	18	43	21	51	36	28	22	25	11	52	9	37	9	54
Zimbabwe	16	29	22	55	16	33	23	50	18	25	16	57	16	27	14	57
Comparators																
SADC	21	33	14	46	21	33	17	46	18	31	14	51	16	30	13	55
Brazil	11	44	33	45	8	39		53	6	28	17	67	5	28	16	67
China	30	48	40	22	27	41	33	32	15	46	32	39	10	47	30	43
Germany	2	41	30	57	1	37	28	61	1	30	23	68	1	28	21	71
India	35	24	16	40	29	26	16	44	23	26	15	51	18	27	15	55
Korea, Rep.	16	37	24	47	9	42	27	49	5	38	28	57	3	39	31	58
Malaysia	23	41	22	36	15	42	24	43	9	48	31	43	11	44	26	45

World Development Indicators, 2012. * Latest year for which data available 2

BIBLIOGRAPHY

- Abor J. and Quartey, P. (2010). *Issues in SME Development in Ghana and South Africa*, International Research Journal of Finance and Economics, 39
- African Union. (2009). African Mining Vision, February 2009
- African Union. (2003). Maputo Declaration on Agriculture and Food Security in Africa, July 2003
- Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2011). *Small vs. Young Firms Across the World – Contribution to Employment, Job Creation, and Growth*, Policy Research Working Paper 5631, The World Bank Development Research Group
- Ayyagari, Beck, and Demirgüç-Kunt. (2007). *SMEs across the globe*, in Small Business Economics, 229 (4), December 2007
- Beal, J. and Davial, J.D. (1994). *Integrating Gender Policy for Manufacturing Industry: Background notes*, Working Paper 66, UNIDO
- Biggs, T.A. and Manju, K.S. (2006). *African SMES, networks, and Manufacturing Performance*, Journal of Banking & Finance, Volume 30, Issue 11. November 2006
- De Kok, J., Vroonhof, P., Verhoeven, W., Timmermans, N., Kwaak, T., Snijders, J. Westhof, F. (2011). *Do SMEs Create More and Better Jobs?*, (EIM Business and Policy Research)
- Delgado C., Hopkins, J.K., Hazell, P., McKenna, P., Gruhn, B., Hojjati, J., Sil, C., and Courbois. (1996). *Agricultural Linkages growth linkages in Sub-Saharan Africa*. IFPRI Research
- Diao, X., Hazell, P., Resnick, D., and Thurlow. (2007). *The role of Agriculture in Development: Implications for Sub-Saharan Africa*. IFPRI Research Report No. 107. Washington DC
- Dzinomwa, G., Musiyarira, H., Tesh, D., Munyati-Nyamukapa, D. and Mchibwa, A. (2014). *The challenges faced by women in Mining in Namibia and Zimbabwe*, Southern African Institute of Mining and Metallurgy, 2014 SOMP Annual Meeting
- Edinburgh Group. (2012). *Growing the global economy through SMEs*, 2012
- Fafchamps and Quinn. (2011). *Results from the Quantitative Firm Survey*. In World Bank (ed.), *Light Manufacturing in Africa, Practical Solutions to Creating Millions of Productive Jobs*.
- Frederic, L., and Kanyenze, G. (2011). *Namibia Employment Policy Environment Assessment Report*; ILO Report prepared for Government of Namibia, October 2011
- FRIDGE. Berkowitz, B., Ramkolowan Y., Stern M., Venter, F., and Webb, M., *The role of South African business in Africa: South African outward investment*, Fund for Research into Industrial Development, Growth and Equity
- Ghatak, S. (2010). *Micro, Small and Medium Enterprises (MSMEs) in India: An Appraisal*, www.legalpundits.com/Content_folder/SMEArti150610.pdf
- Gianecchini, P. (2011). Chinese Special Economic Zones in Africa in *The China Monitor*, Issue 65, September 2011, Centre for Chinese Studies, Stellenbosch University
- Innovos Group. (2014). Study on regional innovation in the SADC region for the Southern Africa Innovation Support Programme, Final Report
- Institute of Global Dialogue, Friedrich Ebert Stiftung. (2008). *Communique of the Fifth Southern African Forum on Trade*, Pretoria, South Africa
- International Trade Centre. (2012). *Africa's Trade Potential: Export Opportunities in Growth Markets*, Geneva, 2012
- Jourdan, P., Chigumira, G., Kwesu, I., and Chipumho, E. (2012). *Mining Sector Policy Study*, Zimbabwe Economic Policy Analysis and Research Unit (ZEPARU), Working Paper, Harare, Zimbabwe.
- Johnson, M. (2013). *Platinum Metals Review 2013*. England, UK
- Jourdan, P. (2012). *Towards a Resource based African Industrialization Strategy*, Africa Task Force Meeting; Preparing for TICADV.
- Kanyenze, G. (2013). *The Nexus between Growth, Employment and Poverty in Zimbabwe: The Economics of Employment Creation*, Paper prepared by Labour and Economic Research Institute of Zimbabwe (Ledriz) for ZEPARU.

- Kanyenze, G. (2012). *Botswana Employment Policy Environment Assessment Report*; ILO Report prepared for Government of Botswana, Paper prepared by Labour and Economic Research Institute of Zimbabwe (Ledriz).
- Kanyenze, G. and Jauch, H. (2011). Paper on the Developmental State.
- Luetkenhorst, W. (2004). *Corporate Social Responsibility (CSR) and the Development Agenda: Should SMEs Care?*. SME Technical Working Paper Series, Vienna: UNIDO
- Madakufamba, M. (2014). Prospects and Challenges of Industrial Development in Southern Africa: Lessons from Chinese Experience with Special Economic Zones, Southern African Research and Documentation Centre (SARDC), July 2014
- Manu, G. (1998). *Enterprise development in Africa - strategies for impact*.
- Matambya, F.A. T. (2000). *Profile of Small and Medium Scale Enterprises in the SADC Economies*, An Inception Report prepared for the World Intellectual Property Organisation, Bonn
- Mathiba-Madibela, M. (Year). Aid for Trade, Case Study, Gender Mainstreaming: The Experience of SADC and Lessons Learned
- Mellor. (1966). *Economics of Agricultural Development*.
- Nkongolo, E.J. (2008). *SMEs/ SMIs centred industrialization for inclusive and sustainable growth in Africa-How Japan can help?*, GRIPS Development Forum, 2008
- Porter, M. (1990). *The Competitive Advantage of Nations*, Harvard Business School, Simon & Schuster
- Report on the SADC Consultative Conference on Gender and Development Gaborone, December 2005, Reflecting & Re-strategising for Gender Based Regional Integration
- Rostow, W.W. (1960). *The Stages of Economic Growth*, Cambridge
- Ryan, B. (2014). *Australia's Paydirt*, Vol 1, Issue 213, February 2014, pp 7
- SADC. (2014). *Revised Regional Indicative Strategic Plan*. SADC, Gaborone
- SADC. (2012). *SADC Industrial Development Framework*. SADC, Gaborone
- SADC. (2009). *Study Report on SADC Industrial Policy and Strategies*, online. SADC, Gaborone
- SADC. (2003). *Regional Indicative Strategic Development Plan*, online. SADC, Gaborone
- SADC. (1996). *SADC Protocol on Trade*. SADC, Gaborone
- SADC. (1992). *Treaty of the Southern African Development Community*. SADC, Gaborone
- SADC. (1992). *Treaty of the Southern African Development Community*. SADC, Gaborone
- Shayo, R. (2012). *Assessment of Gender Impacts of SADC Trade Protocol in Selected Countries*, Economic Commission for Africa
- Sveinung, F., Grünfeld, L.A., Green, C. (2010). *SMEs and Growth in Sub-Saharan Africa: Identifying SME Roles and Obstacles to SME Growth*, Menon Publication No. 14/2010, Menon Business Economics
- Trades Centre. (2010). Zimbabwe, the 11th Province of South Africa: From one form of domination to another — Horse and rider relationship, T. Zivengwa, F. Hazvinei, and M. Tekere
- UNECA. (2013). *Economic transformation in Africa: Drivers, Challenges and Options*, Issues Paper, January 2013, online. UN Economic Commission for Africa
- UNECA. (2011). *Industrial Policies for the Structural Transformation of African Economies: Options and Best Practices*. Policy Research Paper 2, UN Economic Commission for Africa
- UNECA and AU. (2012). *Boosting Intra – African Trade; Zero Draft*. Issues Paper, 7th AU Trade Ministers' Conference and the 18th Ordinary Session of the AU Assembly of Heads of State and Government, UN Economic Commission for Africa/ African Union
- UNECA and NEPAD. (2014). *Mobilising Domestic Financial Resources for implementing NEPAD National and Regional and Programmes and Projects – Africa looks within*
- Vololoniaina, R.A. *Promotion Strategy for SMES, Policy Framework for Enabling Environment: SADC Experience*".
- Vhumbunu, C.H. (2013). *Drawing Lessons for African Integration from Accelerated Development in China*, Institute for China Africa Studies in Southern Africa, Southern African Research and Documentation Centre, Harare, 2013
- Wright, E.A. (2002). *Environmental and Sustainability Concerns in the Mining Industry*, Proceedings 1st Botswana International conference on Mining, Nov 2002. Bibliography
- ZimConsult. (2011). *Pro-poor Regional Strategy to address the issue of Exclusion and Poverty in SADC: Why Conventional Strategies like Commodity Value Chains fail to work?*



SADC Heads of State and Government met at Victoria Falls, Zimbabwe in August 2014 for their 34th Summit and agreed on the need for a strategy and roadmap on industrialization. These Summit decisions gave prominence to industrialization, and injected the much-needed energy and focus on Value Addition and Beneficiation of raw materials. In order to implement the Summit decisions, the SADC Secretariat worked with a team of experts to support Member States in developing a practical, effective, and implementable strategy and roadmap for industrialization in the region. As the chair of SADC from August 2014 to August 2015, the Government of Zimbabwe took an active role in advancing the development of the industrialization strategy and roadmap. The Southern African Research and Documentation Centre (SARDC), through its Regional Economic Development Institute (REDI), supported the Government of Zimbabwe in this endeavour, providing technical support to the Ministry of Foreign Affairs and Ministry of Industry and Commerce in the development of the SADC industrialization strategy framework.

This report is a compilation of some of the preparatory work that informed that process through a series of workshops and papers, and captures some of the analysis and research. It is placed in the public domain as a tool for implementation and awareness of this new Industrialization Strategy and Roadmap, which was approved by an Extra-Ordinary Summit of SADC Heads of State and Government held in Harare, Zimbabwe in April 2015. The analysis focuses on five sectors that the researchers believe provide quick wins for the SADC region as it embarks on the journey towards industrialization. These are Agriculture, Manufacturing, Mining, Micro to Small and Medium Enterprises, and Financial Mechanisms. It also takes a critical look at the important nexus between Industrialization and Trade.