

**AN EVALUATION OF OPPORTUNITIES AND POTENTIAL WITHIN THE
MANUFACTURING SECTOR IN THE SOUTHERN AFRICAN
DEVELOPMENT COMMUNITY (SADC) REGION AND WAYS TO UTILISE
THESE MORE FULLY¹**

Abstract

Irrespective of the many constraints which the manufacturing sector within the SADC region faces, there is potential and opportunities for the sector to improve its current performance. It is therefore important to identify the existing opportunities and potentials within the sector and harness them fully in order for the sector to develop further to form a more solid base for industrial development. Investment opportunities are concentrated in the low technology, resource- and labour-intensive manufacturing activities. Harnessing these opportunities would help the region to develop its resource- and labour-intensive industries more fully and thus derive competitive advantage. While the investment opportunities in scale-intensive, differentiated, and science-based manufacturing activities are limited to just a few countries, utilising these opportunities more fully would help to develop further the manufacturing sector in these high MVA product categories. The presence of a wider market, availability of human resources, improvements in infrastructural facilities, utilising existing intra-industry trade potentials within the region, increased investment in new plant and machinery and advanced technical skills, as well as adequate support to small and medium scale manufacturing industries, could be some of the ways through which the manufacturing potentials within the region's manufacturing sector can be harnessed more fully.

1. INTRODUCTION

Since the manufacturing sector is regarded as the basis and engine for industrial development, an empirical analysis of the manufacturing sector within SADC becomes important. Irrespective of the many constraints which the manufacturing sector faces, there is potential and opportunities for the sector to improve its current performance. It is therefore important to identify the existing opportunities and potential within the sector and explore ways in which these can be harnessed

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more fully in order for the sector to develop further to form a more solid base for industrial development.

Section 2 discusses the investment opportunities within the manufacturing sector in the different SADC countries, bringing forth the implications for harnessing more fully such opportunities and potentials.

Section 3 explores the various ways through which identified manufacturing potentials and opportunities could be harnessed more fully in order for the sector to develop further to form a more solid base for industrial development. Discussing the importance of a wider market through agreements like Africa Growth and Opportunity Act, Cotonou, the SADC Free Trade Area, and other bilateral trade agreements will do this. Of importance too will be discussing availability of appropriate human resources as this has a bearing on manufacturing capacity utilisation. The significance of improvements in infrastructural development will also be addressed as such improvements would present opportunities for the manufacturing sector to realise its potentials more fully as costs would have been reduced and new industrial investments attracted into the region. The possibilities of utilising the existing intra-industry trade potentials within SADC to help realise the potential in the manufacturing sector is also going to be discussed, and so will be the role of active government participation and utilising export processing zones.

Section 4 concludes the paper.

2. OPPORTUNITIES AND POTENTIAL WITHIN THE MANUFACTURING SECTOR

Irrespective of the many constraints which the manufacturing sector faces, efforts should be made to explore the potential and opportunities that may exist and need to be harnessed for the sector to improve its current performance. Identifying such opportunities and potential within the sector and harnessing them fully would help the sector to develop further to form a more solid base for industrial development. This is also important, even though the benefits could be long term, so as to avoid a situation where, as UNIDO (2001:66) observes, industrial development is neglected because “benefits are only reaped over the medium to long term”. Where viability can be established, existing or ailing firms should be resuscitated rather than writing them off.

2.1 Investment opportunities within the manufacturing sector

2.1.1 Resource-based manufacturing

Table 1 shows that most of the investment opportunities and manufacturing potential are concentrated in the low technology, resource- and labour-intensive manufacturing activities. Agro-based manufacturing presents most of the investment opportunities, e.g. food processing investment opportunities are available in all countries; garments and textiles production forms investment opportunities in Botswana, Lesotho, Malawi, Mauritius, South Africa, Tanzania and Zimbabwe; while wood and wood products investment opportunities are available in Lesotho, Malawi, Mozambique, South Africa and Zimbabwe. Harnessing these investment opportunities would help the region to develop its resource- and labour-intensive industries more fully and thus derive competitive advantage.

Since SADC countries are agricultural based and most of the exports are still in primary form, the existing opportunities for manufacturing activities based on agriculture present significant scope for increasing value addition within individual countries for both domestic and export markets. This calls for investment in processing plants or utilising more fully the existing processing facilities which are underutilised due to lack of technical and managerial skills, so that the countries do not continue to lose the opportunity to add value to the domestic crops. Such opportunities could also be utilised through joint ventures between manufacturers and growers, where the latter would produce specific crops for canned, frozen and dried grocery items by the manufacturing sector. The existing gaps in the agricultural chain would also provide for utilising more fully the opportunities within the manufacturing sector, e.g. locally processing tobacco to manufacture cigarettes instead of exporting it for processing and re-importing it to manufacture cigarettes as is the current practice.

Another resource- and labour-intensive manufacturing activity which presents investment opportunities in the region is mineral processing, e.g. jewellery production mainly in Mauritius and South Africa; cutting and polishing diamonds and other precious metals mainly in Namibia and South Africa; while the production of iron and steel and steel products is an opportunity mainly in Malawi, South Africa and Zimbabwe. If such investment opportunities are utilised fully, this could help to improve the performance of the manufacturing sector in terms of mineral processing. SADC (2003) observes that in Zambia, 85 percent of fertilisers are imported and yet the country has good deposits of phosphates which can be used to produce fertiliser. The great deposits of peat and limestone in the country could be exploited to manufacture soil conditioners

for agriculture and horticulture in Zambia instead of importing these products, as is the current practice.

Table 1: Investment opportunities within the manufacturing sector in the SADC region

SADC Countries	Categories of manufacturing activities		
	Low-technology	Medium-technology	High-technology
Angola	Fish processing, Wood products, Brewing	Construction materials, TV assembly	Assembling military trucks, Pharmaceuticals
Botswana	Food processing, Leather and related products, Garments and textiles	Electronic components, Pharmaceuticals	Engineering plastics and packaging, Automotive
D. R. C.	Food products, wood and related products, textiles and clothing, footwear	Metal products, Chemicals and chemical products	Machinery
Lesotho	Garments and textiles, footwear, Consumer goods, Furniture production		
Namibia	Fish processing & fish products, Cotton seed oil, Animal feed, Leather processing, Weaving and milling,	Mineral processing, Cement & fertiliser production, Plastic injection moulding, Canning packaging, Cotton ginning	
Swaziland	Agro-based processing, Sweets and confectionaries, Ceramic ware, Paper	Pharmaceuticals, Glass, Production of chemicals, cement and fertiliser	
Malawi	Processing of agricultural produce, Textiles, clothing and footwear, Wood products, Ceramics	Fertilisers, Pesticides, Glassware, Cement, Iron and steel products, Bicycles, Electrical and electronic products	Diesel engines & generators, Agricultural equipment, Construction equipment, Automotive components
Mauritius	Textiles and apparel, Agro-based processing	Information technology, Electronics, Pharmaceutical	Precision engineering equipment
Mozambique	Agro-based processing	Cement production	
South Africa	Food products, Textiles and clothing, Wood products	Industrial chemicals, Non-metallic mineral products, Pharmaceuticals	Automotive industry, Machinery and equipment, Fuels
Tanzania	Agro-based processing, Textiles & leather goods,	Pharmaceuticals, Cement, Paints, Packaging, Metallic and non-metallic products,	Fuels, Electric & Electronic engineering
Zambia	Agro-based manufacturing	Fertilisers and soil conditioners	
Zimbabwe	Food and beverages, Leather products, Ceramics, Textiles and clothing, Footwear	Chemicals, Pharmaceuticals, Glassware, Fertiliser, Engineering tools	Machinery and equipment

Source: Own Table derived from SADC (2003; 2002:126, 146, 170, 178, 196, 215-216, 233, 255, 272, 292, 337, 357, 374; 1999:124, 141, 168, 179-180, 198, 218, 234, 263, 281, 302, 319-320, 338, 354).

For Angola and the Democratic Republic of Congo, utilisation of existing investment opportunities within their manufacturing sectors is most urgent. SADC (2003) notes that as a result of the civil wars the two countries experienced, their manufacturing sectors have been devastated by damage to infrastructure, while foreign currency shortages, depressed demand, and massive looting, seriously depressed the utilisation of manufacturing capacity. While the levels of risk in these countries are still regarded as very high, there is still a need for investment opportunities in these countries to be utilised so that their industrial sectors can be restructured so as to meet international standards. For example, in the case of Angola, this would imply harnessing the investment opportunities in the construction of physical infrastructures necessary for the manufacturing of pharmaceuticals, rehabilitating infrastructure for somar fishing processing as well as facilitating the establishment of construction materials industries. This would help the country to improve its manufacturing sector contributions to GDP which is less than 5 percent, as well as to improve the annual MVA growth which, by 2002, was at 0 percent (see Figure 1, Appendix 1).

UNIDO (2004:119) notes that while progress in resource-based manufacturing appears an option for countries that have the relevant resources, having the raw material does not guarantee a competitive edge in processing. This is because resource processing can be highly capital-intensive and demanding of skills, and therefore, the SADC countries need to develop strong technological capabilities in these activities.

2.1.2 Medium-to-high technology manufacturing activities

High technology and technologically complex manufacturing activities are limited. However, these opportunities have to be utilised more fully so as to develop further the manufacturing sector in these high MVA product categories. However, it is important to note that countries will have to first of all build the capacities to take on, at competitive levels, these more complex manufacturing activities. Building such capacities can be difficult and slow, but efforts should be made otherwise countries would be stuck with simple and low technology manufacturing activities that do not lead to sustained diversified growth.

In Botswana, building capacities to harness the high technology-related manufacturing investment opportunities in electronics components and product manufacturing, and engineering plastics and packaging, could help in raising the manufacturing sector contributions to GDP which are currently very low, i.e. 4.04 percent by 1999/2000, as well as helping to raise the

annual MVA growth which is low, i.e. 2 percent by 2002 (see Figure 1, Appendix 1). Malawi has investment opportunities in scale-intensive manufacturing activities (viz. fertilisers and pesticides), and differentiated manufacturing activities, viz. machinery, transport and electrical engineering (see Table 1). If these opportunities could be utilised, it would help to reverse the continuous fall in the manufacturing sector contributions to GDP as well as improving the annual MVA growth rates which are currently negative (see Figure 1, Appendix 1). However, it is important to note that the country is one of the least recipients of FDI within the SADC region, its investment climate has been on a continuous decline since 1997, and has a small domestic market. These factors would thus pose limitations to the utilisation of the identified investment opportunities.

Tanzania has investment opportunities in science-based manufacturing, i.e. pharmaceuticals, electrical and electronic engineering, assembling (see Table 1), and this is also supported by UNIDO (2001:64-65). However, it is also important to note that the country experiences constraints which adversely affect manufacturing activities, viz. aged machinery, shortage of working capital and the erratic supply of water and electricity, as observed by SADC (1996:61), while UNIDO (2003:88-89) cites additional constraints as skills shortages, poor infrastructure, import competition from Asia, and a fragmented and ineffective institutional framework for supporting industry. Therefore, as UNIDO (2003:89) notes, there is a need for “capabilities to design and implement the necessary strategies” to reduce these constraints in order for manufacturing opportunities and potential to be utilised fully. The country regards FDI as a solution to recover and boost its manufacturing concerns and receives significantly high levels of FDI with FDI preference in the manufacturing sector. This could be used to utilise more fully the identified manufacturing potentials and investment opportunities where viability is established. This would thus help to raise the current low manufacturing sector contributions to GDP as well as reversing the current continuous decline in the sector’s shares to GDP. It may also help to sustain the continuous gradual rise in the annual MVA growth rate which the country has been experiencing after 2000 (see Figure 1, Appendix 1). UNIDO (2001:64-65) observes that some of the manufacturers already have plans in place to expand capacity in the next 1 to 5 years so as to harness investment opportunities in the various identified areas.

Zimbabwe has the potential for investment opportunities in (i) scale-intensive manufacturing activities, e.g. paper and paper products production, and the production of various chemicals; (ii) differentiated manufacturing activities, e.g. the production of advanced machinery and power-

generating equipment; as well as (iii) science-based manufacturing, e.g. electronics, biotechnology, and the production of pharmaceuticals (see Table 1). However, it is doubtful as to whether these investment opportunities would be utilised fully given the pressures under which the manufacturing sector is operating, i.e. shortages of foreign, very high inflation, and chronic shortages of both domestic and foreign inputs. However, if these investment opportunities could be harnessed more fully, this could help to reverse the current poor performance of the sector as depicted by the continuous decline in manufacturing sector contributions to GDP after 1997 as well as the negative annual MVA growth rates, i.e. -12 percent by 2002 (see Figure 1, Appendix 1). It is important to note that initiatives to try and utilise more fully the country's potential in the production of pharmaceuticals are already under way. For example, The Zimbabwe Herald (2005)² indicate that the Zimbabwean Ministry of Industry and International Trade is spearheading a joint venture between Zimbabwean investors and a Bangladeshi Company to construct a multi-billion-dollar pharmaceutical company in Zimbabwe. By taking advantage of the abundant resources in the continent, the company will produce medicines for Africa and the rest of the world, and thus save foreign currency currently spent on importing drugs.

Mauritius has investment opportunities in science-based manufacturing, i.e. pharmaceuticals, information technology, electronic and precision engineering (see Table 1). By harnessing these investment opportunities, Mauritius would be able to strengthen further its already relatively well-developed and strong manufacturing sector as well as to help broaden its manufacturing base which is currently dominated by textiles and clothing. South Africa presents the widest range of high technology and technologically complex manufacturing investment opportunities within the region. Some of its best performing manufacturing sectors, as observed by SADC (2002:292-3), are in the scale-intensive, differentiated and science-based categories, e.g. basic iron and steel, fabricated metal products, industrial chemical products; industrial and other machinery, electrical appliances; pharmaceuticals; respectively. By harnessing these investment opportunities more fully, the country would be able to continue to develop its already well developed and strong manufacturing sector (see Figure 1, Appendix 1) as well as improving its economic growth rate.

² Cited in Tralac (2005).

3. HOW TO HARNESS AND UTILISE MORE FULLY THE IDENTIFIED MANUFACTURING POTENTIAL AND OPPORTUNITIES

It is important to point out that the existence of and identification of investment opportunities within the region is just but the initial steps in trying to improve the performance of the manufacturing sector. Utilising these opportunities more fully is a necessary challenge which the region has to engage in. The sections below will try and highlight how best the region can utilise more fully the identified manufacturing opportunities and potential and the possible constraints that could be faced.

3.1 The importance of a market in harnessing the potential within the manufacturing sector

The presence of a wider market for manufactured goods would provide opportunities for the SADC's manufacturing sector to grow because this would provide the incentive to increase the capacity of domestic and regional industrial production as firms actively seek and take up opportunities to exploit the potentials within the manufacturing sector, and derive maximum benefit from the market. Agreements like AGOA, Cotonou, the SADC Free Trade Area, and other bilateral trade agreements would create a wider market for SADC manufactured products, thus creating opportunities for the potentials within the manufacturing sector to be harnessed more fully. By exposing firms to export markets, this will force them to pay attention to reducing costs, improve quality and productivity, thus utilising resources more efficiently. The sections below will show how these agreements could create a market for the region's manufacturing sector.

3.1.1 Realising manufacturing potentials through AGOA and the Cotonou Agreement

The USA African Growth and Opportunity Act (AGOA) would provide qualifying countries the opportunity to expand their markets into the USA, thus motivating increased investment outlays (foreign and domestic) in the manufacturing sector, and in the textiles and clothing industry in particular.

Some have argued that due to AGOA, some manufacturing potentials and opportunities have already been identified and are being utilised more fully within SADC, e.g. Muradzikwa (2002:14) observes that investors from the Far East have shown a keen interest in clothing and textiles investments in Lesotho. United States (2001)³ argues that due to AGOA, eleven new factories and four expansions were reportedly awaiting allocation of space by the Lesotho

³ Cited in Naumann (2002:18),

National Development Corporation, with plans already underway by an Asian investor to invest US\$100 million in the construction of a denim mill and two garment factories. United States (2001) further points out that AGOA led to the utilisation of the potential within the clothing enterprise in Malawi where foreign investment was channelled in at least two major clothing enterprises in that country, while during 2001/2, Namibia received a major investment of US\$100 million in its textile and clothing industry through the construction of a vertically integrated textile mill by a Malaysian company Ramatex⁴ (Tralac, 2004a). Also to note is that there has been a rise in manufactured goods exports through AGOA. For example, a more than 100 percent rise in manufactured products exports through AGOA, from 2002 to 2004, was experienced by Angola, Malawi, Mozambique, Swaziland, Tanzania and Zambia; while Lesotho had a 40.81 percent rise, Mauritius a 38.28 percent rise, and South Africa a 16.59 percent, in the same period⁵.

However, it has to be noted that some factors could limit/or constrain the expected benefits of AGOA. For example, where the tariffs are already very low, the benefits of improved access in terms of boosting exports may not be much. Revised lists may not include other products previously in the old lists, and if such products are from sectors which a country would have targeted for improved performance in total trade or targeted for development through export oriented production, then such efforts would be defeated. Also to note is that the current total market share reserved for Africa is small and also Africa still has to compete against other exports from other non-African countries which may have the same or better access to the US market under other trade agreements. Non-tariff barriers, e.g. quotas and rules of origin, could also limit free trade under AGOA, while the duty free treatment can be suspended if the imports are considered a threat to US industries (Stern and Netshitomboni, Date unknown: 3, 6, 7, 8). The benefits of AGOA could also be limited/ or constrained as duty free treatment can be suspended if a country fails to continue to meet the pre-defined criteria⁶, while the halving of the less developed countries (LDC) quota as foreseen in AGOA III for the period 2006 – 2007 would adversely affect the regional clothing sector (Tralac, 2004c).

⁴ Jauch (2005) notes that Rhino Garments (a subsidiary of Ramex) closed down in 2005 claiming lack of orders from its customers in the USA. The attraction of China as a production site and potential market for global capital for textiles and clothing could also have played a role.

⁵ Own calculations from the AGOA trade data derived from the AGOA website (<http://www.agoa.info>).

⁶ This includes progress towards a market-based economy, respect of rule of law, embracing and enforcing general democratic principles of human rights issues (Tralac, 2004b).

Therefore, as Lupupa (2004)⁷ observes, the US market could remain difficult to penetrate despite AGOA. However, Sunday Times (2004)⁸ argues that the AGOA benefits could be made more permanent, especially for the SACU countries, by concluding the current negotiations for a Free Trade Agreement with the United States.

Jauch (2005) observes that with the World Trade Organisation's Agreement on Textiles and Clothing coming to an end on December 31 2004, China's textiles and clothing have been dominating global markets. Therefore, it is important to note that the extent to which SADC could utilise the manufacturing potentials and opportunities within the textiles and clothing sector could be reduced as the region's products may not be as competitive.

The Cotonou Agreement⁹ has and will continue to motivate the identification and utilisation of potentials within the manufacturing sector in SADC. For example, Jhamna (2000)¹⁰ and Naumann (2002:18) note that the spectacular success of the textile and clothing sector of Mauritius has been largely attributed to the industry's relatively favourable access to international markets as a result of agreements like the Lome Convention and the Cotonou. The clothing and textiles industry in Zimbabwe regards the Lome Convention as having played a critical role in enabling the industry to break into export markets and expanding export initiatives (Muradzikwa, 2002:13).

However, while the SADC region thus has relatively easier access to major markets in Europe, the USA and Asia, through these and other various trade agreements, the long distance between the region and these markets could constrain the performance of the regional manufacturing industries as this means high transport costs which could make the regional products less competitive. The relatively underdeveloped and inefficient road network, port and harbour facility, insufficient air cargo, higher communication costs, as well as low teledensity, create other costs which could also make the regional manufactured products less competitive.

⁷ Cited in Times of Zambia (2004) online in the Tralac Newsletter.

⁸ Presented online in the Tralac Newsletter.

⁹ It was concluded in June 2000 and is the successor to the Lome Conventions, which provide qualifying 77 African, Caribbean and Pacific (ACP) countries with preferential access to 15 member states of the European markets. The agreement will be maintained in its current state until 31 December 2007, after which it will undergo significant transformation where a set of reciprocal economic partnership agreements and alternative trade agreements will be introduced (Naumann, 2002:18).

¹⁰ Cited in Muradzikwa (2002:11).

3.1.2 The importance of regional agreements

Since the domestic markets of the SADC countries are small and uncompetitive, the current bilateral trade agreements between SADC countries would continue to contribute towards the development of the regional supply chains which are crucial for utilising the existing and new potentials within the manufacturing sector.

The implementation of the SADC Free Trade Area (SADC FTA) provides the manufacturing sector with the scope to improve its performance and competitiveness so as to take advantage of the large regional market without the hindrance of tariffs. The SADC FTA would also present a regionally integrated economic structure which would make it more cost effective to produce and sell from within the region than from outside the region. As such, this would present opportunities for increased capacity utilisation in the existing manufacturing industries as well as identifying new potentials and opportunities within the manufacturing sector, as investors would seek to access the regional market by locating within the region than by export.

However, while market size and regional access are improved by implementing the SADC FTA, the extent to which the FTA would present a regional market with an adequate absorptive capacity necessary to motivate the current manufacturing potential and to identify and utilise new manufacturing potentials, is subject to debate. For example, some argue that the SADC market is still small in terms of the total population, by international standards¹¹. Apart from the smallness of the regional market in terms of the total population, it can also be regarded as small in terms of the per capita income as this is low in most of the countries, and its annual average growth rate is also low. The regional market's absorptive capacity is compromised and complicated further by the high incidences of poverty, unequal distribution of income, wealth and opportunities. Also to note is that, generally, the region experiences low economic growth rates due to low investment rates, and this inevitably impacts negatively on the regional market's absorptive capacity. It is also important to note that despite the implementation of the SADC FTA, the performance of the manufacturing sector could be constrained by the relatively underdeveloped and inefficient road network, port and harbour facility, insufficient air cargo, higher communication costs, as well as

¹¹ By 2000, the Association of South East Asian Nations (ASEAN) had 10 members with a total population of 525.1 million. The Central European Free Trade Association (CEFTA) had 6 members and a total of 104.6 people. The European Union had 15 members and a total population of 379.5 million. The Mercosur had 4 members and a total population of 216.5 million, while the North American Free Trade Association (NAFTA) had only 3 members and a total population of 411.8 million. SADC has 14 members and a total population of only 187.7 million (CIA, Factbook, 2000 cited in Muradzikwa, 2002:15; Muradzikwa, 2001:21).

low teledensity, which still characterise the SADC region. These would thus create costs which could make the regional manufactured products less competitive.

It is also important to note that SADC countries are at different levels of industrial development and as such, in some countries, infant industries and Small Micro and Medium Enterprises (SMMEs) are significant in helping to utilise more fully the potentials within their manufacturing sectors as these are capable of taking advantage of specific resources in particular locations which are often underdeveloped, and supply larger companies with inputs. Therefore, the increased competition due to the SADC FTA could, in such countries, hamper and even destroy opportunities to utilise these industries to help to harness more fully the existing opportunities and potentials within the manufacturing sectors. This would thus imply applying Article 3 Paragraph 1(c) and Article 21 Paragraph 1 of the SADC Protocol on Trade as well as the need for effective competition policies at both regional and national level. In this way, countries will not waste or lose all the organisational capital already invested in these firms as well as the potentially competitive productive capital.

3.2 The importance of availability of local technological capabilities

Harnessing the potential and opportunities within the manufacturing sector also rests on the availability of appropriate local technological capabilities. It is therefore important to note that countries will have to first of all build the capacity and capabilities to take on, at competitive levels, the identified (both simple and more complex) manufacturing activities. Building such capacities can be difficult, slow, and costly but efforts should be made otherwise countries would be stuck with simple and low technology manufacturing activities that do not lead to sustained diversified growth.

The ability to move from simple activities to more advanced ones means that the region will thus be able to take up manufacturing opportunities in medium and high technology manufacturing categories and utilise these more fully. By building local technological capabilities, not only will the SADC region be able to adopt conventional technology, but would also be able to utilise more competently the advanced and emerging new technologies. This would enable the region to diversify productive structures and increase productivity, thus harnessing more fully manufacturing opportunities and potential at all levels. Also to note is that the process of building technological capabilities should be continuous to enable countries to remain competitive as well

as to be able to develop dynamic comparative advantages which will help to realise more fully newly identified manufacturing opportunities and potential.

Some of the SADC countries have resources bases with highly skilled human resources which are currently benefiting some of the less endowed countries. For example, Coughlin (2001)¹² notes that the clothing and textiles industry in Mozambique has benefited from quite a number of technicians and middle-level supervisors from South Africa and Zimbabwe. Also to note is that a pool of well trained and underutilised manpower is developing within some of the SADC countries due to industrial closures/ and or scaling down of companies due to severe competition from cheaper manufactured imports, foreign currency shortages and other economic hardships. Zimbabwe and Zambia are cases in point, as observed by Price Warehouse (Date unknown:7) and the Zimbabwe Investment Centre (1998:2). This growing pool of underutilised expertise could help to boost capacity utilisation within the manufacturing sectors of recipient countries if the region could relax or ease the current difficulties in obtaining work permits and licenses so as to facilitate productive labour mobility¹³. Taking advantage of the excess and underutilised skilled human capacity from other SADC countries and use it to benefit domestic industries, is a lesson which SADC can learn from the experiences of Taiwan and Hong Kong. These two countries experienced an influx of capital and people with engineering and technical skills as well as entrepreneurial abilities from Mainland China which they took advantage of, thus making the transfer of technology and the development of local technological capabilities much easier.

Since most of the manufacturing activities within SADC are resource- and labour-intensive in nature, the abundant pool of labour (skilled and unskilled) available in the region should continue to be exploited more fully so as to enhance full utilisation of the capacity in these industries¹⁴, and thus lay a more solid manufacturing base necessary for moving onto higher levels of industrialisation. This is a lesson which SADC can learn from experiences of the East Asian NICs where the use of the abundant supply of unskilled labour to specialise in labour-intensive products during the early industrialisation stages enabled the countries to successfully launch the

¹² Cited in Muradzikwa (2001:7).

¹³ This recommendation is not without criticism as countries may fear an influx of foreign employees, a situation which could reduce employment opportunities to the locals.

¹⁴ However, it has to be pointed that the labour cost advantage that can be experienced from the abundant pool of labour, might not turn into a competitive advantage due to non-labour production costs like poor transport, unreliable power and water supplies, e.t.c., which can thus fully erode the labour cost advantage. These cost disadvantages can, however, be rectified by appropriate government policies (UNIDO, 2004:12-13).

manufacturing industries, as well as laying a solid manufacturing base before moving onto higher levels of industrialisation.

3.3 Realising manufacturing opportunities through improvements in infrastructure

3.3.1 Transport facilities

The theory of industrial location illustrates that a region with the lowest production costs (including transport costs) enables profit maximisation, thus making it a more favourable choice for industrial location. With markets and input sources not subject to movement, and the latter located in great abundance in various countries within the SADC region, transportation becomes a very important and major cost to significantly determine industrial location. In this regard therefore, improvements in transport infrastructure become significant to the region, as this would present opportunities for the manufacturing sector to realise its potentials through attracting in new industrial investments. Also to note is that investment in the transport and communication sector would help to develop a functioning, efficient/reliable and up-to-date infrastructure necessary to reduce costs and to promote the ease with which products are transported. With the implementation of the SADC FTA, such a transport system will become more essential as there is a need for countries to access each other more easily and benefit from increased intra-regional trade.

3.3.2 The financial sector

Investment towards the financial sector would help to develop a functioning and up-to-date credit market and financial systems which are essential in giving effective and efficient support to all sectors of the economy. Such a financial system with state of the art technology to handle huge financial transactions with minimum delays would help to boost investor confidence, thus attracting more investment from both domestic and foreign investors. This financial system would thus be an effective support structure that would help the manufacturing sector to realise its potential more fully.

3.3.3 Telecommunication

Infrastructural improvements in telecommunication system would help to cheapen communication between distant places and facilitate the immediate interchange of new ideas, information and technological breakthroughs between distant places. This would thus encourage new industrial investments in remote parts (either within the domestic economy or other regional economies) where manufacturing opportunities exist without fear of isolation and missing out on

new technological development, thus helping a country to harness more fully existing and potential manufacturing opportunities in marginalised or isolated areas.

3.3.4 Technology support infrastructure

This is the infrastructure needed to support new technologies and involves the existence of a strong and supportive institutional framework as well as better organisation of institutions. This infrastructure can be built by developing networks between institutions, e.g. universities, vocational training centres, industry support organisations, research and development, and the firms (UNIDO, 2004:109, 113, 127). It can thus be argued that establishing a technology support infrastructure would ensure the widespread of advanced technologies which thus strengthens industrial capabilities and technology levels, and this would in turn would help to harness more fully and effectively the potential within the manufacturing sector. Developing and promoting regional networks for technology support infrastructure is also beneficial.

3.3.5 Energy

The erratic provision of electric power has often been cited as one of the constraints to the performance of the manufacturing sector in the region. The availability and reliability of power supply is crucial as this facilitates the diffusion of advanced technical applications which are necessary in utilising more fully the opportunities and potential within the manufacturing sector. Therefore, governments have to expand national electricity grids and continue to implement the rural electrification programmes so as to harness the potential in the manufacturing sector irrespective of location. Partnerships with the private sector should be encouraged so as to build and upgrade the power supply system. At regional level, SADC (2002:102) observes that SADC has initiatives like the Southern African Power Pool (SAPP) created in 1995 and Short Term Energy Market (STEM) which began live trading from 23 April 2001. The primary aim is to provide reliable and economic electricity supply to each member state, and thus help to improve the performance of the manufacturing sector.

3.4 Other observations on how to realise manufacturing potential

3.4.1 Utilising intra-industry trade opportunities

With regional integration, the basic conditions provided for in preferential trading arrangements create a market structure within which intra-industry trade can increase to a greater extent than otherwise (Appleyard and Field, 2001:182; Behar, 1991:532). For example, a country can simultaneously reduce the number of products it produces and increase the variety of goods

available to domestic consumers by engaging in intra-industry trade. By producing fewer varieties, a country can produce each variety at a larger scale with higher productivity, thus having the opportunity to increase capacity utilisation within the manufacturing sector as it just focusses on a few varieties and import the rest. Intra-industry trade would also present the firms with the opportunity to exchange information and technology necessary to improve the industrial capacities of their countries, with the less developed countries benefiting especially more from the relatively more developed countries like South Africa and Mauritius.

However, the potential for extensive intra-industry trade induced opportunities to develop the manufacturing sector further could be limited by South Africa's higher degree of industrialisation than the rest of the other regional countries and the contraction of Zimbabwe's manufacturing sector.

3.4.2 Active government participation

There is a need for the government to evaluate the support needs of each industry within the manufacturing sector so as to allocate supportive resources more efficiently. Some industries can become more competitive and achieve their potential if additional support is given. Where new opportunities and potential are identified, government could do well to help to cover some of the initial costs so as to nurture this potential which could promote the country's dynamic comparative advantage.

In order to motivate firms to raise productivity to competitive levels, the government could set targets which if met will be rewarded. By improving the investment climate, government would be able to attract new entrants into the various manufacturing industries, thus creating opportunities for the potential in the sector to be realised more fully. Through well thought out policies and programmes, government could also influence the spread of capital inflows into the manufacturing sector so that it does not concentrate in resource-based activities. This would help to harness manufacturing opportunities in the medium – to – high technology manufacturing category.

As the main provider of education and training, government should be actively involved in ensuring that relevant skills training is offered at tertiary institutions, as this has a bearing on productivity in the manufacturing sector. Training needs should be prioritised at all levels so as to

ensure meeting the skills needs of industry, while efforts should be made to target new skills that are likely to be critical for new technologies that will improve future competitiveness.

3.4.3 Utilising export processing zones

Some countries within the SADC region have set up export processing zones (EPZs) and these provide industrial infrastructure for export manufacturing activities. If their management is improved, employee capabilities are upgraded, as well as allowing them to run on private lines, the EPZs could help to harness more fully the potential within the manufacturing sector, while ensuring economising on costs as well as maintaining quality delivery.

4. CONCLUSION

Despite the many constraints which the SADC manufacturing sector faces, it is important for the SADC countries to continue to identify and utilise investment opportunities and potential in this sector. The current generally poor performance of the sector should not be misconstrued to mean that the sector cannot be improved and thus should be written off. Challenges would undoubtedly be faced in trying to harness more fully the existing and emerging potentials and opportunities within this sector. However, efforts should be made to meet these challenges otherwise the region would continue to lag behind.

This paper has attempted to bring out the existing potentials and opportunities within this sector. Highlighting the manufacturing investment opportunities within the various SADC member states and the implications for utilising more fully such opportunities helped to do this. Ways in which the potentials and opportunities within the manufacturing sector could be harnessed more fully were also discussed, e.g. the creation of a wider market for the manufactured goods, ensuring the availability of appropriate human resources, effecting improvements in infrastructure, and an active role by government.

REFERENCES

- APPLEYARD, D. R., and FIELD, A. J., 2001. **International Economics** (4e). Irwin McGraw-Hill. New York.
- BEHAR, J., 1991. Economic integration and intra-industry trade: The case of the Argentine-Brazilian Free Trade Agreement. In **Journal of Common Market Studies**. 29,5:527-552.
- GROBBELAAR, N., 2004. **'Every continent needs an America' The experience of South African firms doing business in Mozambique**. The South African Institute of International Affairs Business in Africa Research Project. [online]. Available: <http://www.saiia.org.za> [Accessed 14 September 2004].
- JAUCH, H., 2005. Global textile company uses and abuses Namibia. [online]. Available: <http://www.tralac.org/scripts/content.php?id=3918> [Accessed 17 August 2005].
- MURADZIKWA, S., 2002. **Foreign investment in SADC**. DPRU Working Paper Number 02/67, June 2002. Development Policy Research Unit, University of Cape Town, South Africa.
- MURADZIKWA, S., 2001. **The southern African regional clothing and textile industry: Case studies of Malawi, Mauritius and Zimbabwe**. DPRU Working Paper Number 01/58, December 2001. Development Policy Research Unit, University of Cape Town, South Africa.
- NAUMANN, E., 2002. Towards regional industrialisation and policy. In **Trade and Industry Monitor**. June 2002, Volume 22:13-20.
- PRICE WATERHOUSE, Date unknown. **The Comprehensive Investors' Guide to Zambia**. Price Waterhouse, Zambia.
- SADC (Southern African Development Community), 2003. Industry and Trade Regional Highlights. In **Official SADC Trade Industry and Investment Review 2003**. [online]. Available: <http://www.sadcreview.com/sectoral%20reports2003/industry.htm> [Accessed 10 June 2003].
- SADC (Southern African Development Community), 1996. **Southern African Development Community Annual Report, July 1995 - June 1996**. SADC, Gaborone.
- SADC (Southern African Development Community), 1999. **The Official SADC Trade and Industry and Investment Review, 1999**. Southern African Marketing Company (Pvt) Ltd, Gaborone.
- SADC (Southern African Development Community), 2000. **2000 Official SADC Trade and Industry and Investment Review**. Southern African Marketing Company (Pvt) Ltd, Gaborone.
- SADC (Southern African Development Community), 2002. **2002 Official SADC Trade and Industry and Investment Review**. Southern African Marketing Company (Pvt) Ltd, Gaborone.

- STERN, M., and NETSHITOMBONI, N., Date unknown. **Africa Growth and Opportunity Act: Hot Air or Hot Stuff?** Paper prepared at the National Treasury, South Africa.
- SUNDAY TIMES, 2004. **SACU-US seesaw back towards pessimism.** [online]. Available: <http://www.tralac.org/scripts/content.php?id=2923> [Accessed 22 September, 2004].
- THE TIMES OF ZAMBIA, 2004. **Levies hampering textile growth in Zambia.** [online]. Available: <http://www.tralac.org/scripts/content.php?id=2748> [Accessed 10 July, 2004].
- THE ZIMBABWE HERALD, 2005. **Pharmaceutical company for Zimbabwe.** [online]. Available: <http://www.tralac.org/scripts/content.php?id=3918> [Accessed 02 August 2005].
- TRALAC, 2004a. **AGOA: Namibia's exports booming under AGOA** [online]. Available: <http://www.tralac.org/newsletter/21sep2004.html> [Accessed 24 November, 2004].
- TRALAC, 2004b. **ABOUT AGOA.** [online]. Available: <http://www.agosa.info> [Accessed 22 September, 2004].
- TRALAC, 2004c. **AGOA.** [online]. Available: <http://www.tralac.org/newsletter/21sep2004.html> [Accessed 22 September, 2004].
- UNIDO (United Nations Industrial Development Organisation), 2001. **Tanzania: Sustainable Industrial Development and Competitiveness (Analysing competitiveness, strategies, policies and action plan to accelerate industrial development)** [Online]. Available: <http://www.unido.org/doc> [Accessed 21 March 2005].
- UNIDO (United Nations Industrial Development Organisation), 2003. **Industrial Development Report 2002/2003: Competing through innovation and learning.** [Online]. Available: <http://www.unido.org> [Accessed 24 May 2004].
- UNIDO (United Nations Industrial Development Organisation), 2004. **Industrial Development Report 2004: Industrialisation, Environment and the Millennium Development Goals of Sub-Saharan Africa.** [Online]. Available: <http://www.unido.org> [Accessed 21 March 2005].
- ZIMBABWE INVESTMENT CENTRE, 1998. **Manufacturing sector studies workshop report.** Zimbabwe Investment Centre, Harare, Zimbabwe.