The SADC Textile and Garment Industries

Constraints & Opportunities
Myopia or Global Vision?

Peter Coughlin
Musa Rubin
L. Amedée Darga

August 2001

Study commissioned by the
Southern African Development Community

Contents

List of Tables

List of Boxes

List of Figures

List of Charts

Preface

This report is the culmination of a study of the textile and garment industries in the member states of the Southern Africa Development Community (SADC). Based on fieldwork mostly done between October 2000 and April 2001, the project produced country reports for each of the 11 countries that are signatories to SADC Trade Protocol. The present report offers an *overall* view of the industries' opportunities and constraints and proposing institutional, regulatory and policy changes to allow these industries to thrive and become robust by seizing the unique, but temporary, advantages offered in the current international juncture.

Various governmental ministries and departments, non-governmental organizations, and numerous manufacturers spent valuable time sharing their concerns and offering their evaluation of the options open to the region as well each country. To all we are grateful.

This country report was prepared for the Southern Africa Development Community by the German project at the SADC Secretariat (Gaborone) with funding from the German Ministry of Cooperation and Development through GTZ. Peter Coughlin (project leader), Musa Rubin and L. Amedée Darga (the latter two of StraConsult, Mauritius) prepared the report. Though there were many mutual suggestions, Darga was principally responsible for chapter 3; Rubin wrote chapters 4 and 6 (except for the subsection on the Enabling Environment, jointly written with Coughlin); Rubin and Coughlin wrote the recommendations; and Coughlin wrote chapters 1, 2, 5 and 7 and prepared the executive summary. Thomas O'Keefe and Susan Hester (both from the USAid Project for Regional Activity to Promote Regional Integration through Dialogue and Policy Implementation, Gaborone, Botswana) contributed Annex 4 *(AGOA: Opportunities, Conditionalities, Regulations and Marketing).*

The cooperation of Michael Stahl (SADC Secretariat, Gaborone) and GFA-Management (Hamburg, Germany) is acknowledged with appreciation.

Executive Summary

Global Trends

Globalization both menaces and offers opportunities to the SADC region. For the textile and garment industries, this report's focus, the European Union has long been tariff- and quota-free for most such exports from sub-Saharan African countries, except South Africa. Now, with the South Africa/European Union Trade and Development Agreement, even that country will benefit as will those SADC countries that would like to use inputs purchased from it to make products for export to Europe. Likewise, in October 2000, the African Growth and Opportunity Act (AGOA) eliminated the tariff and quota barriers to the U.S. market for sub-Saharan African countries that manage to get their visa systems approved. Thus, the barriers for regional exports to these huge markets are gone or are falling … preferentially.

But the preferences are temporary. Therein the menace! In January 2005, the Agreement on Textiles and Clothing will finally phase out all quotas. With quotas gone, the new trade regime will unleash the Asian and other highly efficient competitors while keeping them only lightly hobbled by the remaining tariffs imposed on countries not covered by Europe's or the United States' General System of Preferences, tariffs that are being steadily phased down. Even the tariff exemption for sub-Saharan African countries covered by AGOA's apparel provisions will end in September 2008. After that, barring an extension of the law, sub-Saharan Africa will have to compete in the U.S. market on even footing, head-on with the world's best. By then too, regional preference agreements with both the United States and the European Union will have proliferated, greatly diluting their advantages.

Meanwhile the increasing diversity and consumer orientation of the market and the insistence on ability to respond quickly to changes in tastes has led manufacturers and distributors to form Quick-Response alliances to sharply cut costs and delivery time. These and other technological changes on top of an excess installed capacity worldwide are making global competition in textiles and clothing intense if not brutal. It is thus imperative for SADC to take advantage of this short period of significant preferences to build a large and technologically robust textile and clothing sector able to replace many imports in the region, increase its share of European and American markets, and, eventually, fend off intensified competition in foreign markets. This requires quick, bold changes in the Member States' regulations concerning the sector in order to encourage production, investment, and the adoption of new techniques by firms and to liberalize regional trade to help set up integrated supply chains.

Industrial Structure and Performance

In that task, the countries in the region have both advantages and disadvantages. The region produces and exports cotton, cotton that could be grown even more plentifully and utilized in a high value-added pipeline making yarn, fabric and clothing. Most countries have cheap or moderately priced electricity; and many have cheap labour ideal for garment manufacturing in the low end of the market. Others with more expensive labour have sophisticated, high precision clothing factories with good capability to make original and appealing designs for the high end of the market where they are still competitive. Some firms have accumulated significant experience in international marketing and earned a reputation for reliability and

quality. Such firms are able to guide a whole chain of suppliers to properly satisfy customers. Finally, in many countries, large industrial cities are in ocean ports with good shipping connections to principal markets in Europe and North America.

Major problems exist too. The region has a huge shortfall in fabric production, necessitating big imports. Building up the textile and clothing sector will require a huge increase in the production of woven fabric in the region since, to satisfy the region's annual consumption of 652 million m², 307 million m² had to be imported in 1999; and this calculation is even before adding the fabric required to respond to AGOA. Fortunately, the region has a considerable excess capacity to produce fabric though, in many cases, better quality-control systems will need to be instituted and outdated equipment, replaced. The apparently large capacity for increasing ***textile*** production is extremely important for AGOA, as two of the largest garment exporters in the region, Mauritius and South Africa, and another important exporter, Botswana, need immediately yarn and fabric made in AGOA-eligible countries **having approved visa systems.** After September 2004, all countries in the region will need such yarn and fabric in order for their garment exports to the U.S. to be duty-free. Fortunately, much extra capacity exists but is currently idle in many mothballed factories throughout the region, especially in Mozambique, Malawi, Tanzania and Zambia, and can be brought on-stream more quickly than creating new capacity from scratch. The existence or not of idle capacity is less important for garment manufacturing since it takes much less time to set up a garment factory. Moreover, garment operations are generally far more flexible than textile operations. A garment factory can, in many cases, switch the type of product it makes without much delay and with minimal capital investment.

Major strengths and weakness exist in the SADC region's textile and clothing supply chain. Analysing these shows the region has significant potential for developing efficient apparel-delivery pipelines though important weaknesses need to be overcome. Two major strengths stand out. The region can support the **entire pipeline** from cotton fibre to finished garments and has many existing **world-class producers** of textiles and garments. The major weaknesses are: *(i)* shortages of experienced staff and adequate training facilities; *(ii)* poor intra-regional transport infrastructure; *(iii)* intra-SADC barriers to trade that make it difficult for firms in different countries to create efficient regional supply pipelines, and *(iv)* insufficient range and supply of man-made fibre and yarn as well as fabric made from these materials.

Factories also face constraints on their ability to **supply** the market and on the **demand** for their products. The constraints cited most frequently, in 10 or more countries, as being either very important or extremely important, were:

- international price competition
- international quality competition
- high cost of international marketing
- inadequate supply of properly trained staff

These results show that regional manufacturers, above all, feel they *(i)* face stiff competition in the international marketplace, *(ii)* have difficulty finding customers due to the cost of marketing, and *(iii)* cannot fully utilize their capacity because the labour force is not well trained. High inland transportation costs was the constraint that received the highest overall rating with firms in nine countries considering this to be between important and extremely important. Coastal shipping is also inadequate. Difficulties in obtaining work permits for expatriate and regional specialists were also important in many countries; and insufficient capital was a 'very important' constraint in all but two countries. Moreover, the management techniques used in many factories are inadequate and provide little motivation

for workers to strive for significantly higher productivity. This, in many countries, is partly due to the absence of institutions capable of encouraging advanced management systems. As for demand, by far the most serious constraint in the local market arose due to the avoidance of tariffs by merchants; and, in the international market, due to price competition.

Faced with these constraints, can the manufacturers in the region compete on cost, quality and delivery? The results are mixed. In general, garment manufacturers are good at meeting delivery schedules, but textile manufacturers are not. The region could be competitive on cotton-fibre costs, but regional barriers to trade and high transportation costs reduce this advantage. The region has large variations in the cost and reliability of electricity. Moreover, labour in the highest cost country in the region (South Africa) costs nine times as much as that in the lowest cost country (Malawi).

The analysis of factor costs and availability, investment attractiveness, and the existence of unused capacity, shows that no single country has an absolute advantage in all factors affecting competitiveness for all steps in the garment supply chain. That chain consists of a series of steps from fibre production through yarn, fabric, and garment manufacturing and distribution. Each step requires different intensity of factor inputs, different levels of capital investment, and different lead times for installing production facilities. For example, textile production requires much larger capital investment but much lower labour input than garment production. As a result, a country with low labour costs, but high capital costs can be expected to develop a competitive garment industry, but would have difficulty developing a competitive textile industry.

The SADC region has abundant cotton supplies; and cotton fibre is traded among the SADC countries without duties or quotas. Much of the local cotton is good quality, medium staple fibre suitable for the garments produced in the region for export. Approximately 10% of the ginned cotton fibre is normally lost as waste when spun into yarn. Therefore, the closer the yarn is spun to the ginnery, the less will be spent to transport material that is ultimately wasted, an important consideration particularly where transportation costs are high.[1] Using regional cotton and spinning it as close as possible to its source could give the region a competitive advantage on fibre costs.

The region is not self-sufficient in man-made fibre. Nevertheless, for garments made for the SACU market, SACU imposes two important restrictions on the use of such fibre: *(i)* the rules of origin for products produced from man-made fibre; and *(ii)* the SACU tariffs on such products. These rules are very awkward for the region. The only producer of man-made fibre and filament yarn in the region is South Africa. South African manufacturers produce a limited range of polyester staple and filament, acrylic staple, nylon filament yarn, and polypropylene filament yarns. Since the region imports nearly half the fabric it uses for garment production, much of which is from man-made fibres, the SACU duties and the rules of origin under the SADC Trade Protocol are among the biggest barriers to the development of competitive, regional garment-supply chains.

Productivity and labour-cost comparisons demonstrate that manufacturers in many SADC countries can be competitive with those in the Far East and South Asia. But some apparently are not. Botswana would have to achieve productivity levels of about 19 pieces per day per operator for the reference garment to be competitive with China. Difficult perhaps, but possible. South Africa would have to produce at the nearly impossible rate of 34 garments per operator day! But, as long as preferences exist, all SADC countries are potentially competitive with China; and all but South Africa are potentially competitive with India on labour cost. Nevertheless, the legal prohibition of or intense union opposition to piece-rate

[1] About 10% of yarn is also wasted in conversion to woven fabric; and about 10% of fabric is wasted in conversion to garments. Thus, it is important to minimize the transportation costs between spinners and weavers and between weavers and garment manufacturers.

payments hampers labour productivity in some countries. Also, in many countries, manufacturers reported they could not use a second shift because of the difficulty in having women work in the evenings. This too drives up costs.

Textile and clothing firms in most countries reported doing well on the competitive aspect of quality. The international norm is 1.5% return of sales. Of the seven countries in which *textile* manufacturers were questioned, this was achieved everywhere but in Swaziland. Of the 10 countries where *garment* manufacturers were questioned, those in Mauritius, Lesotho, Botswana, Namibia and Mozambique achieved results within international norms. According to international norms, rejects should be below 5%. Only the textile manufacturers in Swaziland and Tanzania achieved such results. Garment manufacturers did better, however, with those in all countries, except Namibia and Botswana, meeting international standards. Repairs after sewing in garment manufacturing need to be below 10%. The average reported performance in all countries was, therefore, within international norms. Despite this, few firms in the region have established advanced quality-control systems like ISO 9000,[2] which would give them a big advantage in international markets. Moreover, some countries lack institutions able to certify companies as ISO 9000 compliant.

The factories in many countries are significantly below the international norm (95%) for on-time deliveries due mainly to port congestion and clearance delays for raw materials.

As for electrical energy, most of the countries in the region have competitively priced electricity though Tanzania is a big exception: its monopoly supplier charges 6.6 times more than manufacturers pay in South Africa. Many countries also suffer from prolonged power cut-offs and wild fluctuations in voltage, ruining motors and idling factories.

Having considered the constraints on these industries and their relative competitiveness in each country, the analysis makes clear two things: *(i)* no country has an absolute advantage in all stages of production; and *(ii)* the most competitive pipeline for garment production will be a regional one with each country contributing what it does best. Working together, the region can create competitive pipelines. One country alone cannot, except in limited markets. Some possible pipelines for basic garments are:

- spinning in Botswana with weaving, fabric finishing, and garment production in Lesotho
- spinning in South Africa with knitting, fabric finishing, and garment production in Mauritius
- spinning in Mozambique with weaving and fabric finishing in South Africa and garment production back in Mozambique

The problem, however, is that the trade restrictions envisaged to stay in place over the next few years under the Trade Protocol discourage the rapid creation of such pipelines.

[2] ISO = International Standards Organization.

Countries with potential comparative advantages in different production stages

Production Stage	Countries	Comments
Spinning	Botswana, Lesotho, Mozambique, Mauritius, Namibia, South Africa, Swaziland	
	Malawi, Zambia	Must improve electric supply reliability
	Zimbabwe, Tanzania	Must improve electric supply and investment climate
Knitting	Botswana, Lesotho	Hand and automated
	Malawi	Hand; automated knitting if it can improve its electric supply
	Mauritius, Namibia, South Africa, Swaziland	Automated
	Zambia, Zimbabwe	Hand and automated (see comments under spinning)
Weaving	Botswana, Namibia	Low water usage weaving
	Lesotho, Mauritius, South Africa	
	Zambia, Malawi, Zimbabwe	(see comments under spinning)
Fabric dyeing and finishing and yarn dyeing	Lesotho, Mauritius, South Africa	
	Zimbabwe, Zambia, Malawi	(see comments under spinning)
Garment production-basics	Lesotho, Mozambique	
	Malawi, Zambia, Zimbabwe	(see comments under spinning)
	Tanzania	Must improve the reliability of the supply of electricity
Garment production-fashion and high productivity	Botswana, Mauritius, Swaziland	
	Namibia	Also a logistics centre
	South Africa	High-end fashion garments; needs to relax restrictions on piece rates to be competitive in high productivity garments
Product design, development and merchandising and marketing	Mauritius	
	South Africa	

Policies, Regulatory Framework, and Macroeconomic and Institutional Environment

The macroeconomic environment and regional and country-specific policies, regulations and institutions both constrain and encourage the development of the textile and clothing industries in the region. The pattern is diverse and only in some cases can generalizations be drawn. Where there are problems, some are general; and others, quite specific, as are the solutions. Moreover, even when the problems are common throughout the region, the institutional or policy remedies are often national, not regional, though sometimes a regional solution may be viable. In all cases, the guiding criterion is that any solution must change the environment to allow and encourage firms to become increasingly efficient and world-competitive, … able to turn the threat of globalization into an opportunity.

Macroeconomic performance—the rates of growth, investment, inflation and real interest and the official versus secondary-market exchange rates—varies widely in the region. Whereas most countries in the region have moderate inflation, slow to moderate growth, and liberalized foreign-currency markets, Zimbabwe—the worst case—has a shrinking economy, massive inflation, high real interest rates, and a hugely overvalued currency, conditions that cut sales, increase costs, scare investors, make others want to flee, and slash trade with nearby countries. A few other countries still suffer significant inflation, overvalued foreign-exchange rates, and restrictions on access to foreign currency.

Though most SADC member countries have implemented policies to create a stable economy and liberalize foreign-exchange controls, the inflation and foreign-exchange difficulties in Malawi and Zambia and, above all, Zimbabwe not only restrain growth in those countries but have large negative repercussions for trade and investment in the entire region, including for the textile and garment industries. Worse yet, for political reasons, Zimbabwe—

a country with the region's best cotton and a strong though somewhat bludgeoned textile and garment industry—is ineligible under AGOA. This means that producers in SADC, except for those in least developed countries,[3] may not use Zimbabwe yarn or fabric in garments exported under AGOA to the United States. Thus, AGOA gives, but AGOA takes away, denying a key player in one of the region's most competitive supply pipelines.

Beyond these macroeconomic and political concerns, a country's fiscal, technological and human-resource policies, the regulatory framework governing the establishment and functioning of corporations, and the institutions supporting and regulating economic activities strongly influence decisions to invest as well as the ongoing viability of a project. As for taxes and customs regulations and administration, the salient common problems involve *(i)* the non-existence of provisions for or unnecessary limitations on export processing zones, *(ii)* the failure to rebate, suspend, or eliminate tariffs and the value added tax (VAT) on inputs, spares, equipment, and purchased services used to produce exports, *(iii)* the apparent failure of South Africa's Customs Service to deduct the value of South African yarn or fabric incorporated in imported textiles or clothing before calculating the amount of duties payable; *(iv)* slow and often corrupt customs services, *(v)* the employment of time consuming import-inspection services to vet cargo beyond their competence to evaluate with adequate precision, *(vi)* counterproductive administrative methods for allocating national quotas among individual producers under the MMTZ-SACU textile and garment scheme, and *(vii)* the prolonged failure by many countries in the region to get a visa system approved by the U.S. Customs Service to make their apparel exports to the U.S. eligible under the African Growth and Opportunity Act (AGOA). Other regulations *(i)* grossly complicate and slow down the process of setting up a functional company, and *(ii)* protect communication and electricity monopolies that charge excessive rates for poor service.

As for human resources, the manufacturers in most SADC countries viewed the existing labour regulations as but minor impediments to their operations, though in four countries—Botswana, Mozambique, Zimbabwe and Swaziland—the regulations are deemed *important* constraints on capacity utilization, and in South Africa, they are deemed *very important*. The most frequent complaint was about the tedious and expensive regulatory process for firing workers, even those caught stealing. Another problem is the prohibition of piece-rate pay systems in Lesotho and, under some conditions, in Botswana and the strong opposition to such by the labour unions in many other countries. Moreover, the time consuming, frustrating, and often corrupt administrative procedures to obtain work permits for foreign workers daunt industrialists and would-be investors in many countries. On the other hand, some countries (e.g., Lesotho) in law or practice allow an industrialist to hire expatriates for up to 5% of his total workforce. Given the scarcity of technicians, supervisors and managers in many countries, the frequent and onerous constraints on the employment of expatriates are serious constraints on competitiveness. In this context, SADC countries should seriously consider adopting—at least on a pilot basis for these industries—provisions guaranteeing *(i)* the automatic approval of work permits for up to a certain percentage of each factory's total workforce and *(ii)* the free movement of managers and technical personnel who are citizens of countries within the region.

As for support activities, the training of managers, technicians and operators is critical and closely related to the presently high demand for expatriates. Nevertheless, with the exception of South Africa and to a lesser extent Mauritius, very little *formal* training of skilled personnel, technicians, supervisors and managers occurs in the textile and clothing industries in the region. Typically, the training that occurs is *informal* and on the shop floor. In-factory training schools are extremely rare and present only in some of the best, most efficient

[3] Lesotho, Swaziland, Mozambique, Malawi, Tanzania and Zambia, but only through September 2004

factories in the region. Textile and clothing technology and training institutions only exist in Mauritius and South Africa and then with significant gaps in coverage. Even in Mauritius and South Africa, where some training facilities exist, only 40% of our respondents deemed that the courses offered are "sufficient for the needs of their industry". Elsewhere, except for Lesotho, the responses were even less favourable. Except for Mauritius, Botswana and South Africa, the "lack of appropriate training institutions" is considered a very or extremely important barrier to the use of formal training despite its acknowledged utility to the industry.

Growth will increase the need and, if policies are right, the demand for training thereby motivating factories and educational institutions to offer a wider spectrum of relevant courses. In view of this, we asked interviewees in seven countries to indicate whether they would support or oppose a proposal to institute a training levy on salaries to create a fund from which to reimburse employers for training expenses. The *overwhelming majority* strongly endorsed the proposal, with the caveat that most were sceptical of government and believed that the fund should be run by a semi-autonomous body "appointed by the private sector with formal approval by the government".

Besides efforts to support and stimulate training on a national basis, SADC should recognize that the problem is regional and requires a regional approach, especially for specialized or higher-level training. Nevertheless, despite the scarcity of certain types of training specialized for these industries, there has been no comprehensive regional study of these industries' training needs nor of the availability of courses to satisfy them. To assess this requires such a study with a view toward setting up or expanding *regional* training institutions and technology centres for this sector where required.

The regulatory framework also governs company formation and competition policy. To set up a company takes a month or less in Botswana, Swaziland and South Africa, three to six months in Lesotho, and two to eight in Mauritius but much longer in most other countries. These delays are an obvious deterrent to investors. Moreover, few countries have a clear policy promoting competition. For example, in Mozambique, Malawi, Tanzania, the government defends the local telecommunications monopoly against the use of Internet telephony and fax services, which cost 1% or 2% of present charges. Such policies cost both industrialists and the nation dearly and are just another stroke against their international competitiveness.

As for credit, both the survey responses and anecdotal information confirm that even pre-shipment finance for orders based on letters of credit is extremely difficult or plainly impossible to get particularly in Zimbabwe, Malawi and Zambia and, to some extent, in Swaziland. The implications can be dire. Orders are lost; and employees by the hundreds are fired. Moreover, whereas international subsidiaries can usually obtain foreign credit, companies owned by local entrepreneurs often cannot. As a result, the local banks' slow decision-making and timid policies toward industrial credit jeopardize, above all, these national entrepreneurs, a strata that most governments would like to see grow. In contrast, very few multinational subsidiaries complained about constraints due to lack of capital.

Though the SADC Trade Protocol has pushed liberalization of trade within the region, the slow pace of liberalization and the protocol's restrictive rules of origin (including, in practice, for EPZs within the region) still hamper the region's textile and clothing industries. Still suffering from an inward-looking myopia, many countries are ever so cautious in opening up their markets even to trade within the region, a trade that would spur their manufacturers to specialize, achieve economies of scale, and improve their competitiveness in international markets. The slow phase-out of tariffs on inputs for the textile and garment industries—with the SACU tariffs on fabrics being eliminated only in 2005—gives the sector a slow start in the process of regional industrial and trade rationalization so necessary to take full advantage

of AGOA as well as the EU/ACP accord.[4] Without the elimination of all these intra-SADC tariffs **now,** the potential volume of trade involved in *efficient* regional supply pipelines will be sharply reduced. Instead, inefficient pipelines will be protected thus reducing everyone's, including South Africa's, ability to compete aggressively in European and American markets. Elimination of intra-SADC tariffs is a **precondition** for starting highly efficient and competitive strategic alliances involving spinners, weavers, garment producers, and large retail chain stores in the region in preparation for using these technologies in yet more competitive global markets.

Contrary to the common impression, the double transformation rule itself is a grave hindrance to the development of the textile and clothing industries in the region. Given the notorious level of customs fraud and tariff evasion especially for clothing misreported as second-hand or donated goods, clothing manufacturers face ever tougher competition from imports since, to get full protection, they must use fabric made in the region, often an impossibility for man-made fibres for which a grave shortage exists and, even when possible, expensive. The textile firms too face a dilemma. Since most sell primarily for regional consumption and the SADC member states seldom grant tariff rebates for the imported inputs used by indirect exporters, textile mills—unless integrated all the way to clothing or incorporated in export processing zones—are at a big disadvantage against imports when trying to sell to export-oriented clothing manufacturers. Thus, instead of having a burgeoning garments industry creating derivative demand for textiles, the garment industry's sales have, at best, grown slowly under the pressure of imports.

The restrictive tariffs and rules of origin ignore two screaming realities. First, the region has a shortage of man-made fibres while consumers in the region express a big demand for garments using such fibres. Therefore, regional supply pipelines will not be able to replace much of these imports coming in from outside SADC unless they can import fibre, yarn or fabric and use these to make garments deemed to be of SADC origin. Second, the region apparently has a surplus of cotton that is exported rather than converted into textiles and garments.

The creation of efficient supply pipelines is also impeded because, even under the waiver benefiting the region's least developed countries—Malawi, Mozambique, Tanzania and Zambia—the tariff-free quotas for fabric exports to SACU are **trivial** and, for clothing, **very small,** utterly insufficient for them to build up their industries. For example, a single idle mill in Zambia has a capacity more than double the quota for all cotton fabrics and yarn from Zambia, hardly an incentive to an investor to recuperate that factory since the quota will certainly be taken up by existing mills. The quota for **all** MMTZ factories represents the consumption of just two or three large garment factories employing a total of 5,500 workers, just 5% of South Africa's clothing industry. SACU's concessions to the MMTZ countries reveal no real intention to encourage them to enhance their capacity to produce *fabric*. On the contrary, the underlying strategy seems, implicitly, to only weakly encourage their garment industries and, when the double-transformation rule applies fully, require them to buy SACU textiles, mostly from South Africa, when making garments for the region. It is a strategy ever so myopic and far from revealing a global or even a regional vision. Nor is it in line with the objective of setting up efficient supply chains involving SADC's LDCs.

With such a defensive attitude by SACU, strategic alliances and efficient pipelines will be hard to build; and, though growth will occur, it will be hindered by fiscal and bureaucratic obstacles. If SACU persists in trying to defend its overwhelming trade imbalance with the rest of the SADC countries, the latter should openly consider stopping the trade diversion and

[4] Under the new EU/South Africa Trade and Development Agreement, SADC countries may buy inputs from South Africa and count these as originating inputs when exporting products to the E.U. under the EU/ACP agreement.

consequent losses by drastically lowering their MFN tariffs on goods they import mostly from SACU, thereby making SACU goods compete on an *even footing* with those from *any* other sources inside or outside SADC. Perhaps then a basis for more serious discussions between the parties could be found. If the small non-SACU economies in SADC agree to sacrifice through trade diversion by buying goods from SACU that can be purchased more cheaply from alternative international sources, they must be assured that the agreement offers them significant dynamic gains particularly in industries such as textiles and clothing where they have of a chance of competing.

Despite pleas from Zimbabwe and Mauritius, SACU has also, so far, refused to *(i)* waive the double-transformation rule for **yarn** made from man-made fibres produced in nil or insufficient quantities in the region and *(ii)* extend this exception to man-made fibre based **fabric** and **clothing** whenever the respective inputs are produced in nil or insufficient quantities in the region. This intransigence virtually blocks out such imports; and, correspondingly, the trade in textile fibres, yarn, fabric and clothing between SACU and Mauritius was 7.6 to 1 in favour of SACU in 1999.

On top of this, when clothing imports do comply with the double transformation rule, SACU slaps tariffs on their full value even if the inputs used to make them came from SACU. This limits such imports and, ironically, the demand for textiles made in SACU, especially since the South African clothing manufacturers are under heavy assault by third-country imports. Hence, the policy merely diverts trade to Asian suppliers.

The Way Forward

The strategy for the region that will have the greatest effect on the textile and clothing industry is what we refer to as *regional is local*. The concept is a simple, basic principle on which most regional trade associations are founded. The consequences for SADC are far-reaching and require a fundamental change in the way member states view their trading partners.

The goal of this strategy for the textile and clothing industry is to build competitive garment-supply chains. This strategy will encourage the private sector to develop each part of the textile and clothing supply chain to do what it does best, where it is done best. Since the factor requirements among the different steps of the supply chain vary greatly, no single country has the resources to perform competitively every part of the pipeline while processing for every possible market. Nor should they try. Rather, by abolishing tariffs on equipment, spares and inputs used by the textile and garment industries and by adopting the *regional-is-local* strategy for clothing, the countries in the region will specialize efficiently and achieve economies of scale and improved competitiveness for the whole supply chain.

Improving the competitiveness of the supply chain will help SADC capture a greater share of the export market. It will also lower the cost and raise the quality of garments sold to SADC consumers thus increasing everyone's welfare and, with the fall in costs and presumably prices, thereby selling more while competing better against imports. To understand the full importance of increased sales, we need to understand the value structure of the garment-delivery pipeline. Estimates of the ratio between the factory- price and retail-price of garments range between 1:4 and 1:6. Even under the lower estimate, nearly 75% of the value-added in the pipeline is from wholesaling and retailing! Thus, an increase in the sale of garments in the region means enormous benefits to the economy, especially when arising from income and not mere substitution effects. By lowering the cost of garments in the region, regional manufacturers will be more competitive in both regional and export markets and, thereby, achieve further economies of scale; regional retailers and wholesalers will sell

more; regional consumers will pay less and get better garments; and the whole regional supply chain will grow and become more efficient.

The most effective private-sector strategy for increasing regional co-operation and developing more competitive supply chains in the garment industry is the creation of **strategic alliances** among manufacturers and retailers. Strategic alliances enable all parts of the supply chain to work together as partners. This partnership lowers costs, risks, and delays while increasing the range and value of the products delivered. To build strategic alliances, the regional-is-local strategy is essential as it will enable firms to set up alliances with little regard to national boundaries.

The basis for strategic alliances is the set of business practices called Quick Response. Starting in the 1980s, major players in the apparel-supply chain developed this concept (see Box on next page) whereby the retailers and garment and fabric suppliers work together and share information to create, produce and sell a line of products. Pilot studies in the late '80s and early '90s showed that *(i)* the time between the conception and sale of a product could be reduced by several months, *(ii)* large amounts of inventory could be squeezed out of the supply chain, *(iii)* all parties to the alliance would show increased profits, and *(iv)* the consumer would have a better choice of merchandise designed for their specific lifestyles and needs. Moreover, as regional firms enter into the international marketplace, particularly the U.S. market, many of their customers will compel them to work as Quick-Response suppliers. Rather than waiting for this to happen, the regional suppliers should anticipate it and prepare to work this way. They should also see Quick Response as a way to compete and should offer it proactively to customers.

Regional and international markets are diverse and present different competitive requirements for price, quality, response time, and product innovation, and order sizes. Private sector firms need to understand the competitive requirements of their current and target markets. This understanding will enable them to select and implement the specific changes in production, logistics, and management techniques they will need to be competitive. In addition, private sector firms will form strategic alliances targeted at specific markets. These alliances need to be created with firms who can meet the competitive requirements of the markets the alliance targets.

As firms compete on price, quality, response, and product, Quick Response alliances help them improve on all these scores. However, barriers to intra-regional trade in clothing and textile products impede the creation of pipelines using the most competitive suppliers. Eliminating these barriers in line with

Quick Response: The Modern Strategy for the Apparel Pipeline

Quick Response (QR) is the strategy being widely adopted in the consumer apparel industry, as well as other consumer-product industries. It was formulated in the 1980s and began to be widely adopted in the 1990s after pilot studies in the United States showed the benefits to all parts of the apparel supply chain. The strategy boils down to three things:

- strategic alliances among retailers, textile and apparel manufacturers, and fibre suppliers
- using consumer demand to *pull* products through the pipeline rather than pushing goods to the consumer
- tactics to move goods and information faster through the supply chain and, thereby, reduce inventories

The critical business processes and technology for implementing Quick Response are:

- electronic data interchange, which is increasingly done over the internet
- vendor managed inventory
- short-cycle manufacturing techniques
- advanced logistics technology including bar-coding of products and cartons

the *regional-is-local* strategy also lowers costs by permitting increased specialization and volumes.

To improve the delivery performance of garment pipelines in the region, strategic alliance partnerships could *(i)* take advantage of the potential proximity of fabric and garment manufacturers and of garment manufacturers and retailers and *(ii)* implement Quick Response programs to reduce the length of the apparel merchandise calendar. Co-operation and proximity can help them to improve the product's quality because the producers in the pipeline can respond quicker and in a synchronized way to changes in consumer demand. Strategic alliances based on Quick-Response techniques also permit manufacturers to compete better by targeting specific market segments (e.g., mass or niche markets). After learning to use these techniques within the region, they could then apply them as a selling point in international markets.

Though the creation of strategic alliances for Quick-Response supply pipelines will improve efficiency, the latter is also determined by the macroeconomic, regulatory and policy environment in each country and within the region. Besides conducive national macroeconomic environments, successful supply pipelines require the removal of barriers to trade and to the free movement of managers and technical personnel who are citizens of countries within the region.

Even with strategic alliances, however, the potential for increasing the supply of textiles and clothing in the region is mixed. There is a shortage of man-made fibre and fabric of all types,[5] but the region produced 155,000 tonnes of cotton in excess of consumption in 1999. Data from 1996 to 1999 show that fibre, textile and apparel imports from outside SADC equalled 90% of the total imports of those products. What then are the prospects for producing more textiles and garments in the region?

The most important issue for increasing production is the huge shortfall in textile production. The supply of fabric and yarn must be increased if the region is going to develop competitive garment-supply chains. Without such an increase, SADC will be constrained in its effort to penetrate the U.S. market since, after 2004, AGOA requires all countries to use yarn and fabric produced in the U.S. or AGOA-eligible countries. The current production and capacity-utilization figures reveal that the region has the capacity to increase textile and garment production, but not enough to cover the shortfall in current demand. In 1999, the shortfall in woven apparel fabric production was 307 million m^2; and the potential increase is about 58% of that. The remainder must come from imports or further increases in regional production achieved by reviving idle plants or building new facilities. This does not take into consideration the potential for increasing exports under AGOA or Lomé/Cotonou. By the quota year 2004/2005 when all garments shipped duty-free under AGOA must be made from African or U.S.-origin yarn and fabric, the shortfall will be nearly 64,000 tonnes or **4.5 times what was exported in 1999,** this assuming no growth at all in U.S. apparel imports. If the growth in U.S. apparel imports is 6.4%,[6] the shortfall will be 86,000 tonnes or **six times** 1999's exports.

Looking at cotton production, the 155,000 tonnes in excess of consumption is sufficient to meet the short-term potential for increasing yarn production, even if all the new yarn were made from cotton and we subtract the 10% waste of converting cotton to yarn. Cotton accounts for about 63% of the fibre used for spinning in the region. If this proportion remains the same, as it has for many years, even with the optimistic estimates of increased yarn production we have used, the increased consumption of cotton for spinning would be 74,000 tonnes or half the region's excess cotton production. On the other hand, as there is currently a

[5] except nylon filament yarn, which constitutes about 1% of the total fibre consumption in the region

[6] U.S. apparel imports, in dollars, adjusted for inflation grew by an average of 6.4%, on and annual basis, from 1990 to 2000.

shortage of man-made fibre produced in the region, if any portion of the increased yarn production uses man-made fibres, that will necessitate increased production from South African fibre manufacturers or an increase in imports. Man-made fibre production is one of the most capital intensive parts of the garment supply chain; and low international prices due to global excess capacity might make it hard to attract investment for increasing South African capacity. As a result, third-country imports of fibre, yarn and fabric must and will be an important source of increased use of man-made fibre in the region.

What of the regional market for clothing? Current data on textile and garment imports for some countries in the region is difficult to get. The data that is available, however, indicate that most countries get most of their imports from outside SADC. Seventy-nine percent of clothing and 93% of textiles and fibre imported by SADC countries comes from *outside* the region (Table 34). Thus, the region's manufacturers supply little of the regional trade. A big reason for the low level of intra-SADC trade is the shortfall in fabric production, hence the urgency to liberalize this trade.

Other measures specific to the textile and clothing industries are also necessary to facilitate their growth.

- data gathering and dissemination for effective policy decisions and for efficient purchasing, marketing, investment promotion, technology diffusion;
- internationally compatible, regional logistical standards for inter-industry communi-cation and labelling;
- facilitation of links between textile mills and small garment producers and between large and small garment producers; and
- assistance to speed up the certification of AGOA visa systems.

Sophisticated logistic techniques are important features of Quick-Response strategic alliances. The critical techniques are:

- electronic data interchange (EDI), which is increasingly done on the internet;
- bar-coding of products and shipping cartons,
- vendor managed inventory (Box 8).

These techniques reduce order cycle times and reduce inventory levels, thereby reducing costs and merchandising risk (B*ox 7)*.

EDI and bar-coding on products and cartons require a regional standards organisation that has the legal authority to set inter-industry legal standards among SADC manufacturers, wholesalers and retailers in the garment supply chain that are compatible with international standards. This is especially urgent as export customers will demand that SADC suppliers use the techniques. Anticipating this, SADC suppliers should begin to implement and use them for intra-SADC trade. In this way, they will gain experience, iron out the bugs, and even be in a position to offer advanced logistical services proactively.

Vendor Managed Inventory (VMI) is among the most sophisticated methods for inventory management used in the consumer-products industry. Implementation requires trust and intense cooperation among suppliers and customers. EDI, bar-coding, and compatible computer systems are also required. VMI is considered the ultimate goal of a strategic alliance as it provides the most efficient supply chain possible. Implementing VMI provides huge benefits through lower inventory costs, fewer price markdowns, higher sales, and increased profits (Box 5*)*.

Information and research are also needed. Producers, especially those with yet little experience in international markets, need to know about markets for inputs, potential

customers, and reliable sales agents; and potential investors require information about installed capabilities and product ranges and qualities within the region. Gathering and availing such information should be done within a framework for promotion, on a regional scale, of both investment and exports. For such, we advocate the creation of **SADC Inc.** under the joint auspices of SADC and the Association of SADC Chambers of Commerce and Industry. Besides the dissemination of information, SADC Inc. would promote the formation of strategic alliances between producers and large retail chains and advocate this as a major technique for cutting costs, speeding up delivery, and increasing the pipeline's responsiveness to customer needs—in short, a technique for world-class competition.

Conclusions

SADC countries must mobilize their resources and streamline their bureaucratic procedures to take advantage of huge opportunities offered—temporarily!—in European and North American markets. The European Union has long been tariff- and quota-free for African-Caribbean-Pacific countries; and, as of October 2000, the African Growth and Opportunity Act (AGOA) made the huge market for clothing in the United States duty- and quota-free for sub-Saharan African countries fulfilling certain political, legal and economic conditions.[7] Meanwhile, Asian and other highly productive manufacturers will still be restrained by quotas, but only till January 2005. Freed of quotas, they will then assail the northern markets and displace uncompetitive suppliers that had hitherto survived by the grace of quota preferences. And then, in 2008, even the tariff preferences under AGOA end. If not competitive by then, African manufacturers will enter a crisis as they are beaten out of that market.

This preferential phase-out of tariffs and quotas thus offers SADC countries an historically unique opportunity to rapidly develop their textile and garment industries. But the offer comes with a threat: grow fast and learn to be competitive now or *lose your markets* and, hence, your factories. Go global or withdraw, stifled in a small protected market! Is there a choice?

Vacillation chooses. So does boldness. If bold, SADC will seize the opportunity while it lasts and, in a swift stroke, eliminate the tariffs and many other administrative barriers that still hamper manufacturers who desire to set up strategic alliances to create highly competitive Quick-Response supply pipelines from fibre to clothing and from there to the retailer. It will also mobilize private initiatives for more efficient purchasing, the creation of efficient pipelines, and better international marketing. Many inefficiencies and inequities ensue, however, from attempts to regulate the trade in yarn and fabric. To remove these, SADC as a community (or, less ideally, each country by itself) should adopt Mauritius' successful model: the abolition of all **intra-SADC** and **external Most-Favoured-Nation (MFN) tariffs** and **value-added taxes** on equipment, spare parts, and raw materials used by the textile and clothing industries. SADC should adopt a policy that *regional is local* implying the elimination of all intra-SADC barriers to trade in fibre, yarn, fabric **and** clothing. Under this proposal, **only clothing** would keep the MFN tariffs and, hence, remain protected against imports from outside SADC.

With one blow, these reforms would eliminate many bureaucratic inefficiencies, e.g., the need for pre-shipment inspection, the delays and demurrage charges incurred while clearing

[7] AGOA is particularly important because, by insisting that the fabric used in the clothing must be produced in the U.S. or in AGOA-eligible countries, it will press investors to create supply chains including a big increase in regional textile production.

goods through customs, and the need for bonded warehouses.[8] This would facilitate efficient strategic alliances for supply pipelines serving both the intra-SADC[9] and external markets, thus simultaneously enhancing import substitution, economies of scale, specialization, and better management processes. This reduces costs and improves quality and, thereby, assists export promotion, which brings further gains in efficiency. Investment promotion centres throughout the region should also be converted into true one-stop-shops. In the end, with an easy fiscal policy and, hence, fast customs clearances plus a limited but guaranteed right to choose managers and technicians, investors would receive a clear message: *welcome!* And those desiring to set up strategic alliances would be unencumbered by the present barriers.

Restrictions on intra-SADC trade inhibit efficient regional pipelines from using the region's excess cotton to replace ex-SADC imports of textiles and garments.[10] Insistence on double-transformation rules is an **impediment** to regional growth. Indeed, regional free trade is a precondition for the creation of efficient supply chains, which is one of SADC's key objectives. If achieving world-class competition is indeed the goal, the inward looking, defensive development model must be abandoned. If SADC countries—especially the regional powerhouse, South Africa—continue protecting inefficient and uncompetitive textile and garment factories, everyone, including the more progressive and successful producers will suffer.

Which path to choose? Will SADC countries adopt policies permitting them to seize the opportunities now offered? Or, will they continue to insist on small advantages over each other in their tiny internal markets protected by tariff barriers and bureaucracy, which together hamper the establishment of highly efficient strategic alliances for supply pipelines from fibre to cloth and onward to the consumer?

Will we, in our myopia, let the opportunity pass by? Or, shall ours be a global vision?

Recommendations: A Synopsis

The role of government should be to facilitate private-sector efforts by: eliminating barriers to trade, amending laws to simplify approval for the movement of people and capital among countries in the region; establishing consistent policies for investment and regulation that will encourage investment; and providing the seeds for the development of training, technology and marketing where the private sector either does not have the resources or is unable to co-ordinate these developments themselves.

---

[8] Short of eliminating MFN tariffs on inputs, the countries with yet no provisions for export processing zones or their equivalent should adopt the necessary enabling legislation, a still awkward second-best solution.

[9] In some cases, alliance partners may prefer to gain experience using Quick-Response techniques in the intra-SADC market and later expand to into external markets using these techniques.

[10] Though Zimbabwe is not AGOA-eligible, Lesotho, as a lesser developed country, may import Zimbabwe fabric to make AGOA-eligible garments. But Lesotho may **not** import fabric **duty-free** from Zimbabwe to make garments for the SACU markets (principally South Africa). If there were no restrictions on using the fabric in Lesotho, Zimbabwe fabric manufacturers would be able to increase the volume of production and thus lower costs through economies of scale. If Lesotho garment manufacturers could use the Zimbabwe fabric, already the cheapest in the region, they could produce better priced garments for the South African market. This would lower prices for South African consumers, increase the volume of retail sales (75% of the value-added going to local retailers and wholesalers), and create many more jobs than whatever is lost in South Africa's capital intensive textile industry as a result of fabric imports from Zimbabwe. Furthermore, Lesotho and Zimbabwe manufacturers would have the opportunity to start developing Quick Response-based strategic alliances with South African garment merchants and retailers, thus improving the competitiveness of that supply chain and stimulating a further demand response.

Besides the obvious recommendations for the maintenance of stable national macro-economic environment and for efforts by SADC to speed up the approval of national visa systems under AGOA, we recommend:[11]

Policy and Regulatory Framework

Since many textile mills have become internationally competitive as manifested by their already large exports, the remaining mills would benefit from increased competitive pressures to *either* improve their productivity *or* sell out to others possessing the know-how and resources to do so. The time has come for the mills to target, directly or indirectly, large external markets especially in Europe and America. SADC member states should, therefore, immediately *eliminate all tariffs* on **intra-SADC** and **external** trade in raw materials, accessories, productive equipment, and spare parts used in the textile and clothing industries, thus only maintaining protection for clothing manufacturers. Fibre, yarn and fabric would, therefore, be totally liberalized; and garments, subject to a *single transformation* rule of origin to be exempt from tariffs within SADC. Thus, the effective rate of protection would be strengthened against garments made *outside* SADC but slashed to zero for those made within the region. Doing this would stress that *regional-is-local*, a policy that all SADC member governments should officially adopt. This would encourage the development of strategic alliances among manufacturers and retailers in the region.

To encourage swift growth of the textile and clothing industries, corporate profits taxes on these industries should be reduced to not more than *15% on profits* for factories not operating within an export processing zone. In a growing industry, the decrease in tax revenues would be quickly offset by growing revenues from profits taxes and value-added taxes on activities stimulated by the multiplier effects of the spending engendered by the different beneficiaries of the growth in these industries.

These tax reductions will also enable SADC countries to abolish pre-shipment inspection on the above goods and reduce the frequency of customs inspections at the ports and interior frontiers for such goods and the consequent delays and expenditures for warehousing of goods awaiting release by the customs authorities. This will slash and make more predictable the transit time for raw materials to reach factories, a critical consideration given the stress international clients put on timely deliveries.

Pending adoption of the above liberalized regime, SACU should grant much enhanced textile and clothing quotas—well above capacity levels—for MMTZ countries so as to greatly encourage investment and production in those countries till such time as intra-SADC tariffs on textiles and clothing are abolished.

Since EPZ factories are often some of the most efficient in the region, SADC should explicitly deem them to be within the geographic area covered by the Trade Protocol albeit as a special category. As such, these factories and others operating under schemes privileging export-oriented manufacturing would be allowed to sell within the region up to 20% of their output and benefit from SADC's concessionary tariffs so long as *(i)* they pay duties to the SADC country of origin on the imported **inputs** used therein; *(ii)* they pay profits taxes on the portion of their sales made within the region; and *(iii)* the products satisfy the corresponding rules of origin. The Member State where the factory is located would be responsible for enforcing the 20% limit.

SADC Member Countries should also:

[11] Here, we only list the report's major recommendations. For the full list, see the section on Recommendations on pages 110 to 117.

- eliminate—on a experimental basis—all migratory barriers for high-level technicians, supervisory personnel, and managers in the textile and garment industries who are SADC-country citizens; and
- institute a 1% to 2% national training levy on the value of total salaries so as to create training funds to reimburse employers for training expenses, including for approved training in other countries, with preference for those within SADC.

Institutional Reform

Since SADC needs to promote the entire region as an attractive destination for investment while **also** encouraging advanced technical and managerial training for citizens of SADC countries, SADC should encourage member states to adopt regulations for expatriate labour in such a way so as to advance both goals simultaneously: stimulation of investment **and** better training. Since the cumbersome, slow, impractical and, sometimes, corrupt approval of work permits is a serious deterrent to investment and the efficient operation of the textile and clothing industries, SADC should encourage member states to adopt quick and transparent systems with *minimal scope for bureaucratic discretion.* To achieve both the above goals with a single instrument, we recommend that—on a pilot basis for the textile and clothing industries—states abolish their paper-oriented, highly discretionary systems in favour of a largely **fee-based system** where the funds so raised would be earmarked for industrial training channelled through the industrial training levy fund in each country as recommended above. As a guide for discussion, we suggest variants of the following system to be initially applied only to the textile and clothing industries.

- In accordance with the *regional-is-local* policy, expatriate managers, supervisors and technicians from SADC countries would not be subject to quotas or fees though they would reduce the allowable numbers of non-SADC expatriates.

- All companies would have the automatic right to hire expatriates up to 5% of their total workforce subject to the payment of a fee.

- Within the above quota, posts held by expatriates in new companies or expanded facilities of existing companies would be exempt from the fee for four years. In the fifth year, the number of fee-exempt expatriates would fall to 4% and any posts above that number up to the automatic quota of 5% would have to pay a substantial annual fee (e.g., $5,000) to encourage firms to train nationals and employ preferentially SADC citizens. In the sixth year, the percentage of fee-exempt expatriates would fall to 3%; in the seventh to 2%; and in the eight year and beyond to 1%. To encourage small firms, those with more than 10 and less than 50 employees would be allowed to employ one fee-exempt expatriate after the seventh year; and those with 51 to 200 employees, two. In all cases, the focus would be on the time a **post** is held by an expatriate, not on the time a particular expatriate had been in service with the company.

Countries will also need to continue or strengthen their efforts to reform their customs authorities in order to speed up the clearance of imports, reduce customs fraud, and increase the predictability of the impact of tariff policy.

SADC should also spearhead and co-ordinate lobbying activities to persuade the United States to include Zimbabwe under AGOA since the ineligibility of Zimbabwe under AGOA denies the entire region a competitive hub for many supply pipelines. In this effort, the

community should mobilize lobbies[12]—retailers, buyers and garment merchants—who would benefit from having Zimbabwe yarn and fabric available for AGOA-eligible garments. As part of this effort, SADC should try to get the United States government to agree to specific actions to be undertaken by Zimbabwe to make it AGOA-eligible. Zimbabwe—as all other SADC countries that do not yet have their visa system in place—should also begin immediately to negotiate with United States Trade Representative to get a visa system approved and operational as done by Mauritius even before AGOA was passed.

Marketing and Information

SADC needs **SADC Inc.** to research and energetically promote synchronized multi-country investment projects in the region. It would also organize a Web-site, perhaps in co-operation with existing information and research organs, to furnish manufacturers information about reliable and competitive international and regional suppliers and about potential customers and dependable, fair-priced sales agents and their contacts. Perhaps as a joint project of SADC and the Association of SADC Chambers of Commerce and Industry and major regional and international development banks plus development organizations such as TIMSSA on the board of directors, SADC Inc. might initially prioritize the textile and garment industries, especially considering that the international juncture is highly propitious for their immediate development in the region. While SADC Inc. will initially need strong support and financial assistance from diverse sources including SADC itself, SADC Inc. should be structured so as to give a dominant voice in its governance to the private-sector participants.

Private-Sector Initiatives

The biggest problem the textile and clothing sector in the region faces is a shortfall in yarn and woven fabric production. The public and private sectors must urgently focus attention on increasing textile production in the region. For that, the key private-sector initiatives are:

- implement strategic-alliance partnerships;
- identify markets and their precise needs in terms of product, quality, response, and price;
- select competitiveness strategies and implement necessary changes in business and manufacturing processes and equipment;
- develop and implement regional inter-industry linkage standards to support the use of new logistics and computer and communications technology using the textile and clothing industry as a pilot;
- improve staff skills through regular formal, training programs;
- implement ISO 9000 and improved quality-control procedures;
- implement Quick-Response technologies; and
- implement industrial engineering programs to reduce the time and cost to produce garments.

The recommendations for the public sector are actions that will support and facilitate these private-sector initiatives.

[12] as done successfully by the Mauritius Export Processing Zone Authority on behalf of Madagascar

Introduction

Factories layered in dust and cobwebs; *others* in dire financial distress using 10% of their capacity or with workers laying on or underneath their machines awaiting raw materials to be released by customs; *others* working a normal week but with outdated machines, poor managerial systems and little knowledge of international marketing; and yet *others* operating at full capacity, using advanced scientific motivational and quality-control methods and exporting to highly demanding European and American customers — such is the panorama of the textile and clothing industries in SADC.

This weakness, this strength must now be combined and mobilized to take advantage of huge opportunities offered—temporarily!—in European and North American markets. The European Union has long been tariff- and quota free for African-Caribbean-Pacific countries; and, as of October 2000, the African Growth and Opportunity Act (AGOA) made the huge market for clothing in the United States duty- and quota-free for sub-Saharan African countries fulfilling certain political, legal and economic conditions. Meanwhile, Asian and other highly productive manufacturers will still be restrained by quotas, but only till January 2005. Freed of quotas, they will then assail the northern markets and displace uncompetitive suppliers that had hitherto survived by the grace of quota preferences. And then, in 2008, even the tariff preferences under AGOA end. If not competitive by then, African manufacturers will enter a crisis as they are beaten out of that market.

This preferential phase-out of tariffs and quotas thus offers SADC countries an historically unique opportunity to rapidly develop their textile and garment industries. But the offer comes with a threat: grow fast and learn to be competitive now or *lose your markets* and, hence, your factories. Go global or withdraw, stifled in a small protected market! Is there a choice?

Vacillation chooses. So does boldness. If bold, SADC will seize the opportunity while it lasts and, in a swift stroke, eliminate the tariffs and many other administrative barriers that still hamper manufacturers who desire to set up Quick-Response strategic alliances for supply pipelines from fibre to clothing and from there to the retailer. It will also mobilize private initiatives for more efficient purchasing, the creation of efficient pipelines, and better international marketing.

How? That is the subject of this report.

After presenting the international and regional context in which the textile and clothing industries operate, we examine the performance of and constraints on the factories visited and evaluate the impact of their macroeconomic, political, institutional, and regulatory environment. Next, we analyse their ability to increase production and supply linkages within the region and consider some institutional, informational and regulatory changes of *specific* relevance for the textile and garment industries. After the conclusions, we offer recommendations, some to be implemented by SADC, others by individual countries.

Methodology

During October through December 2000 and in February 2001,[13] the project team conducted factory visits using a standardized questionnaire and interviewed key personnel in

[13] For Mozambique, interviews were conducted in April and December 2000 and follow-up interviews were done in May and June 2001. For Swaziland, the interviews were done in April 2001.

the ministries of industry, investment promotion bureaux, customs authorities, chambers of commerce, and industrial associations in all 11 countries signatories to the SADC Trade Protocol. The factory questionnaire was constructed to reveal the practices and problems associated with:

- purchase and reception of inputs;
- production
- human resources
- distribution; and
- marketing

in addition to the impact of the macroeconomic, political, fiscal, regulatory and institutional milieu. The interviews were conducted with the guidance of open and closed questions though considerable discretion was given to the researchers to initiate *ad hoc* investigations of problems revealed during the interviews or factory visits. The preparation of the present report also benefited from an extensive review of the literature and diverse statistical sources. In total, the research teams visited 104 functioning factories in the region. In some countries, managers or owners of a few closed factories were also interviewed, e.g., in Mozambique, Swaziland, Tanzania, and Zambia.

Table 1. *Number of functional factories visited*

Botswana	6	South Africa	13
Lesotho	3	Swaziland	6
Malawi	10	Tanzania	11
Mauritius	11	Zambia	8
Mozambique	8	Zimbabwe	22
Namibia	6		
		Total	**104**

Global Trends and New Market Opportunities in the Textile and Clothing Industries

Worldwide, textiles were one of the earliest offshoots of the peasant economy; and industrial production of textiles and clothing constituted an engine of growth in early industrialization and economic development, e.g., in Japan in the early 1900s, in Hong Kong, Korea and Chinese Taipei from 1950 to 1980, and in the Association of South East Asian countries and China after 1980.

Textiles and clothing constitute 9.1% of world trade in manufactured goods; and the sector provides 142 million formal and informal jobs worldwide. Textiles and clothing trade is, however, heavily concentrated among industrial countries with imports of the EU, U.S., Japan, Canada and Switzerland accounting for 70% of the world total. By contrast, imports by developing countries (e.g., China, Mexico, Korea, Hong Kong) amount to only 14% of the world total.[14]

[14] WTO International Trade Trends and Statistics 1997. Available at the WTO website (www.wto.org/wto/archives).

SADC has, therefore, rightly prioritized the development of the textile and clothing sector as an engine of industrial development, employment and linkages in the region. In many cases, however, the rhetoric brought no action. Though successive Lomé and, now, Cotonou Agreements granted market preferences to the African-Caribbean-and-Pacific (ACP) states, including all of SADC except South Africa, only Mauritius and, recently, Madagascar have capitalized much on the opportunity.

The renewed interest of the region for the textiles and clothing sector is coming at the beginning of a decade promising major changes in the international trade of these products while the parameters of competitive advantages are being redefined by technological and market trends. The textiles and clothing sector can still be an important engine of growth, job creation and foreign exchange earnings for the SADC region, however, the successful development of the sector will depend on how well policymakers and industrialists understand the forces shaping the market and are prepared to move fast to create the necessary conditions for a coordinated fast track lift off.

It must be understood that:

- The geographical distribution of textiles and clothing production has been shifting due to diverse pressures.

- Technological and supply-chain practices are redefining the conditions of comparative and competitive advantages. (See the section **Overview of the Garment Supply Chain,** page 14.)

- The opening of markets after the final elimination of quotas (but not duties) in 2005 under the Agreement on Textiles and Clothing will foment battles for market shares.

- In order to comply with the World Trade Organization's (WTO) rules, the next round of EU-ACP negotiations consequent to the Cotonou agreement will redefine the non-reciprocal preferential access to European market available to ACP countries for decades under the successive Lomé conventions.

- The Africa Growth and Opportunity Act extends new market access opportunities to many sub-Saharan countries, including all of SADC except Zimbabwe, if certain political conditionalities and other technical requirements are complied with.

Geographical Distribution of Production: The Impact of Market Practices, Technological Changes and Structural Shifts

The geographical distribution of production in the textile and clothing industries has changed dramatically over the past 35 years and is still evolving due to structural pressures.

Table 2. *Developing and developed countries' share of world export market* (%)

	Textile		Apparel	
	Developing	**Developed**	**Developing**	**Developed**
1965	16.0	76.4	14.8	69.7
1975	17.6	74.6	32.0	54.5
1985	28.0	62.2	47.9	41.5
1990	39.0	59.1	56.4	41.3
1997	37.6	62.4	65.2	34.8

Sources: for 1965 to 1990, Murray (1995:68); for 1997, calculated from the *Annual Statistical Report on U.S. Imports of Textiles and Apparel*, April 1997

Note: The percentages do not always add up to 100% because, for years, the Eastern European countries and the newly industrializing countries were counted separately. This also explains why a change in one category is not reflected precisely in the other.

From 1965 to 1990, the share of world production of textiles of developing countries has increased from 16% to 39% while that of developed countries from 76.4% to 59.1%. In apparel production, the share of developing countries increased greatly from 14.8% to 56.4% while that of developed countries dropped from 69.7% to 41.3% (Murray 1995:68).

Fibre Production. Changes have occurred in the type and range of fibres used. Man-made fibres have increased by 50% in terms of fibre consumption in the last 50 years. However, man-made fibres account for only 45% of use in apparel, while cotton represents 53% (AAMA 1998:11). Creation of man-made fibres has remained the domain of developed countries given the level of investment required in R&D, but part of the production has been captured by the newly industrialized countries specially the Asian ones.

Technological Change. Technological level of development in production and, as a corollary, the level of labour intensity involved has been an important factor in this geographical shift. Labour-intensive production of clothing has been relocating to low labour-cost regions, while capital- and technology-intensive textile production remains largely in more developed countries.

Technological change has been far more dramatic in textile than in clothing production. These changes concern both the replacement of manual with mechanized and automated operations, as well as the increase of speed with which a particular process is carried out.

In 1975, a typical loom for fabric production could produce 8.3 square yards of fabrics per loom hour, by 1997 loom productivity has gone up to 34.7 square yards per loom hour. High capital investment is required for such equipment.

Technological improvement in clothing production concern operations such as laying out and cutting material, which have undoubtedly brought significant productivity gains. Limited improvements have been achieved in sewing and assembly of garments, hence labour has remained a critical input for these operations.

Product Diversity. The dynamics of the textile and clothing industry is also increasingly subjected to product diversity to suit customer needs or whet the customer's appetite. Frederick Abernathy *et al.* in their book, *A Stitch in Time*, refers to a survey carried out in 1992 by the Harvard Center for Textiles and Apparel Research which showed that, by volume, fashion items represented 28% of the American market, fashion-basic items (variants of basic items with some inclusion of fashion elements) 27%, and basic items 45%. Although the percentages may differ in the other main markets of Europe and Japan, basic items remain

the major part of the markets though fashion and fashion-basic items[15] play an important part and have major implications for the capacity of producers to respond to the pace of change in demand in shapes, colours, and fabric types. Just-in-time delivery, zero defects, and the capacity of producers to respond to quick changes in demand become highly important, the more so in fashion items where orders are placed once for a season and shelf life is short.

Changes in Retailing Practices. All the above changes have altered the way textile producers, apparel producers, importers, and retailers relate to each other. In the supply chain, changes in retail management are imposing new conditions on production planning, sourcing strategies, and delivery time. The need to reduce the cost of maintaining large stocks of a wide variety of items, and the use of information technology with bar coding and scanning allowing for real time point-of-sale information on replenishment needs have imposed new terms of competitiveness onto producers and shifted responsibilities to them which require additional investment in information technology. For example, European clients demand that the factories in Mauritius attach retail price tags and place the garments on hangers in the containers ready to go direct to the retail outlet. This requires apparel producers to invest in technology for packaging and labelling and affects the end buyers' choice of suppliers.

As a result of lean retailing practices, the exigencies of short-cycle production and fast time-to-market, new regional production zones are emerging—i.e., United States-Mexico-Caribbean Basin, Western Europe-Eastern Europe-Mediterranean-North Africa, and Japan-Southeast Asia—which combine developed markets with developing areas of production. For example, though four Asian suppliers—China, Hong Kong, Taiwan and Korea—represented, in value terms, 38% of the U.S. imports in 1991, their share *dropped* to 16% by 1997. On the other hand, Mexico increased its share from about 4% in 1991 to 11% in 1997. The Caribbean Basin countries constituted 15.8% in 1997.[16]

Competition in clothing production today is much more than a simple matter of price and cost: it involves the ability to respond efficiently to frequent shifts in the supply chain and to stringent demands imposed by customers often arising from new retailing practices and the consumers' changed preferences. Competitiveness, therefore, involves the efficient management of both production and logistics. While comparative labour cost remains important, the imperatives of production planning and delivery time deriving from retailing practices in the main markets may be shifting comparative advantages among developing countries themselves.

Substantial Change in International Markets during the Present Decade

During the course of this present decade, various events will alter the textile and clothing international markets:

- the phase-out of the Multifibre Agreement/Agreement on Textiles and Clothing by 2005;

- the negotiation under the Cotonou Agreement of new development partnership between the European Union and the ACP countries, with Economic Partnership Agreements (EPAs) being the favoured option of the EU;

[15] Fashion basic items are typically variants on a basic item but containing some fashion element (such as stonewashed jeans or khaki pants with pleats).

[16] These figures are derived from the U.S. Department of Commerce census.—*Source:* www.census.gov/foreign-trade/www/statistics.html#products

- the gradual mutual opening of markets between South Africa and the European Union under the EU-South Africa Trade Development and Cooperation Agreement;

- the opening of the North American market with the African Growth and Opportunity Act (AGOA); and

- the implementation of the SADC Trade Protocol and the continued negotiation for an agreement on textiles and clothing as part of the protocol.

These events present both opportunities and threats for the development of a textile and clothing sector for the SADC region.

Multi-Fibre Agreement

Market opportunities need to be evaluated against the long history of restraint in textiles and clothing trade: the bilateral voluntary agreements of the 1950s; the formal arrangements for cotton textiles from 1961 to 1973; the Multifibre Arrangement from 1974 to 1994; and the key provisions of the Agreement on Textiles and Clothing (ATC). Textiles remain one of the hardest-fought issues in the General Agreement on Trade and Tariffs (GATT) and the WTO. In the run-up to the 1996 Singapore Ministerial Conference (SMC), textiles again became a focus of attention for many members.

The principal objective of the ATC is to integrate the textiles and clothing sector into GATT. Accordingly:

- Quotas are to be phased out in four tranches over a 10-year period (1/1/1995; 1/1/1998; 1/1/2002; 1/1/2005), encompassing 16%, 17%, 18% and 49% of imports of all specified textile and clothing products based on the volumes of 1990.

- Products not liberalized but under quota or otherwise restrained will have their growth rates increased during the first three steps of the phase-out period by 16%, 25% and 27% respectively.

- Each of the four groups into which the spectrum of textile products had been broken down (i.e., tops/yarns, fabrics, made-ups, and clothing) must be included in each of the liberalization tranches during the 10-year period.

Under the ATC, textiles and clothing will be fully integrated into the GATT by the year 2005. Most developed countries, however, have scheduled the removal of quotas and tariffs for the bulk of commercially meaningful items towards the very end of the phase-out period.

Will international trade in textiles and clothing really be free after 2005?

The phasing out of MFA/ATC will mean that markets will be free from quotas, but tariffs will remain. Furthermore, producers and exporters need to keep in mind that there may be non-tariff barriers such as eco-labelling, social clause, and code of conduct conditionalities.

The opening of markets during the MFA phase-out is pregnant with opportunities and threats. For SADC countries, the implications are:

- increased competition in preferential markets such as the European Union under the EU-ACP agreements due to the lowering of barriers to other developing and newly industrializing countries; and

- increased pressure to open SADC's protected markets to imports.

In other words, there will be sharper competition both to keep one's own market and conquer market share in the target markets of developed countries.

EU Market and Cotonou Agreement

The European textiles and clothing industry represents over 110,000 enterprises (or about 10% of industrial companies in the EU, 90% of which are small and medium enterprises) and directly employs over 2.3 million people. Its total turnover exceeds € 200bn a year. The EU is the world's second largest exporter of textiles and clothing products (€ 34.8bn in 1999, up 19% from 1995) and is the world's largest exporter of textiles (€ 20.3bn in 1999).[17] The EU is the world's largest importer of textiles and clothing products. In 1999, such imports were valued at € 59.3 billion. Indeed, they account for half of the EU's total consumption of textiles and clothing and grew by 31% between 1995 and 1999.

Despite the existence of quotas on the imports from 21 countries, of which 14 are WTO members, the EU market for textiles and clothing products is, overall, rather open. The EU has no quotas on textiles and clothing imports from the least developed countries. In addition, these countries, including large garment suppliers such as Bangladesh, usually benefit from zero duties due to preferences under the Generalized System of Preferences (GSP), the Lomé/Cotonou Convention, or, recently the Everything-But-Arms Amendment.[18]

In 1999, roughly 44% of the EU's imports in textiles and clothing products were duty free. For 46% of the imports, a GSP reduction of 15% of the most favoured nation tariff rate was applied.[19] For those who have to pay them, the EU's tariffs are low for raw materials (0.7%) but rise progressively from 5.3% for yarns and fibres, to 6.3% for fabrics, and 11.9% for clothing, the latter representing more than 30% protection for the value added of the process itself.[20]

The Lomé/Cotonou Convention continues to offer ACP states better market access than the EU's GSP. On average, in 2000, the preferential margin between the two tariff rates was 1.6% for manufactured goods and 6.8% for textiles. However, the ACP/EU trade concessions into the EU market violate GATT Article 1 on Most Favoured Nation Status to the detriment of other developing country exporters, as evidenced in the recent banana dispute between the EU and the U.S. The current WTO waiver for Lomé IV expired on February 29, 2000, placing the Millennium Round and the ACP trading privileges on a collision course.

The Cotonou agreement, successor to Lomé IV, stipulates that the ACP states and the EU will negotiate and conclude, by 2008 at the latest, new WTO compliant arrangements between themselves. In 2004, an evaluation will be made of those countries that have decided that they are unable to negotiate partnership agreements. The EU would then study alternatives in order to offer those countries a trade framework equivalent to their existing situation but in a form compliant with WTO rules. The EU prefers, however, to replace the present bilateral regimes by free trade agreements with regional groupings. Such trade agreements

[17] Background Note 2 Report on Market Access European Commission Directorate-General for Trade Directorate D-Sectoral trade questions, market access negotiation and management of textile agreements; 12/7/2000

[18] The Everything-But-Arms Amendment to the EU's Generalised Scheme of Preferences eliminates duties and quotas for essentially all products imported from the world's 48 poorest countries, as of 5 March 2001, though "the full liberalisation of sugar, rice and bananas will be phased in during a transition period" (European Commission 2001). Since, under the Lomé and Cotonou agreements, all SADC countries except South Africa have long been able to export textiles and clothing free of duty and quotas to the EU, the amendment does **not** increase the benefits for these industries within SADC.

[19] idem.

[20] Trade in Goods. The Textile Sector. Legislation, Reports and Texts in http://europa.eu.int/comm/ trade.

are called Economic Partnership Agreements (EPAs), a proposal resisted by ACP countries. In general, studies[21] on the African sub-regions point out that the traditional benefits of the EPAs would be less for LDCs than for non-LDCs. The crucial implication of EPA will be the replacement of non-reciprocal access under EU-ACP agreements by reciprocal, albeit asymmetrical access, as evidenced by the EU-South Africa precedent.

Reciprocity will, in due course, imply having developed an industry competitive enough to be able to keep its own home market. The industry, and particularly small garment producers are already hurt by imports of second-hand clothing from Europe by merchants or aid organizations. In 1998, the European Community exported 515,800 tonnes of second-hand clothing worth 486 million euros (Hyvarinen 2001).

Textiles and clothing are the only manufactured products accounting for a significant share of ACP exports; and they increased in volume by nearly 70% from 1988 to 1997.

The opening of the European market as a consequence of the phasing out of the MFA/ATC will undoubtedly signify an erosion of the preferential access of ACP textiles and clothing. Although the preferential margin for textiles and clothing will remain significant over GSP, SADC countries, which have traditionally benefited from preferences under EU-ACP agreements, will face tough competition from other developing countries' exporters of textiles and clothing which have already built strong competitive advantages, and which have advantages of proximity.

The other factor which has an impact on exports to the European market is the introduction of the euro as currency. The impact will on the one hand depend on how much the sector is dependent on raw materials imported from outside the region, such imports being generally paid for in U.S. dollars, and on the other hand the relative exchange rate between the dollar and the euro. The Mauritian clothing industry exporters whose market is mainly Europe have been seriously adversely affected by this factor in the last two years. This also points to the fact that countries having a more integrated sector will have a further competitive edge.

Notwithstanding all the above trends indicating that access to the European market, which is one of the largest, will be highly competitive in general categories of garments, African countries have one niche market which needs to be seriously considered in the sector strategy: it is that of demand for ethnic, handcrafted items, particularly strong in the growing home-products sector (Biggs *et al.* 1996).

With the loss of market share of European producers in their own market compounded by pressure to further open up its market, the European Union views exports to third countries as a strategic instrument for the European textile and clothing sector.[22] This strategy is being applied in the EU's negotiations for free-trade-area agreements such as the South Africa-EU Trade, Development and Cooperation Agreement. The same concerns underlie the EU-ACP negotiations for a new partnership.

EU-South Africa Free Trade Area

The EU-South Africa Trade, Development and Cooperation Agreement is a comprehensive trade, aid and cooperation agreement governed by WTO rules on Free Trade Agreements (FTA). The agreement requires the removal of customs duties on "substantially" all trade over a maximum period of 12 years. The agreement provides for the EU to remove duties on

[21] EU-ACP Negotiations. Commission Staff Working Paper for Negotiation Group 3: Economic and trade cooperation. Synthesis of the studies of the impact of the EU's REPA proposal on ACP sub regions. Seven studies were commissioned to evaluate the impact of REPA. The one concerning SADC was carried out by IMANI Development.

[22] The Impact of International Developments on the Community's Textile and Clothing Sector, Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, 6/10/1995

imports from South Africa on approximately 95% of its tariff lines over a period of 10 years from implementation (1 January 2000). In return, South Africa will be required to remove duties on around 86% of its imports from the EU over a period of up to 12 years in a few cases. However, South Africa's tariff cuts will mainly occur in the second half of the 12-year transition period, i.e., between 2006 and 2012. This will give the South African government more manoeuvring space to protect and nurture sectors like textiles and clothing. Whereas tariffs for SADC countries would fall to zero by year 7, for the EU, this would be achieved between year 8 and year 12.

Like any preferential trade agreement, the EU-South Africa Trade, Development and Cooperation Agreement contains detailed rules of origin. The rules of origin contained in the agreement are very similar to those applied by the EU to most of its preferential partners; however, some important differences have been tailor-made in the EU-South Africa agreement, namely, in terms of the cumulation of origin. These provide for:

- **Diagonal Cumulation:** Goods using material from other ACP countries are also defined as originating in South Africa, provided the value added in South Africa exceeds the value of the ACP materials.

- **Full Cumulation:** This applies to members of the Southern African Customs Union (SACU). Here products are defined as being of South African origin if the final stage of processing is undertaken in the country, regardless of the value added.

Africa Growth and Opportunity Act

The Africa Growth and Opportunity Act (AGOA) is a non-reciprocal unilaterally determined trade regime offered by the USA to Sub Saharan countries.[23] AGOA, which is part of the Trade and Development Act 2000, opens the U.S market for exports with preferential access for a period of eight years ending 2008. AGOA being a unilateral declaration of preferences, and the U.S President having the right to determine import sensitivity of products, its renewal beyond 2008 remains subjected to circumstances that will prevail at that time.

To benefit from the quota-free and duty-free preferential access to the U.S market, sub-Saharan African countries must fulfil two conditions under AGOA. The first is **political**, mandating that countries must meet political, human and work rights criteria. Additionally, countries cannot engage in activities that undermine *U.S. national security* or *foreign policy interests.* Certain governments unofficially express serious concerns about the potential use of this condition for geopolitical reasons, under the pressure of certain economic interests, or be used for arm twisting in future WTO negotiations. The second is **legal and bureaucratic**, requiring countries to put in place a customs visa system officially approved by the U.S customs authorities to address trans-shipment risks and to guarantee compliance with the rules of origin and ensuing documentation.

AGOA's rules of origin are far more stringent than those of EU-ACP agreements. AGOA provides that, with certain very specific exceptions, to benefit from the quota-free and duty-free access, apparel assembled in sub-Saharan Africa must be from fabric wholly formed in sub-Saharan Africa from U.S. or sub-Saharan African yarn.

Under the rules of origin, African LDCs are given a very short period ending September 2004, during which apparel produced from fabrics imported from anywhere in the world

[23] The technical details regarding AGOA are dealt with comprehensively in Annex 1. Here, we highlight the macroeconomic aspects of this new trade regime.

would be eligible for the duty-free, quota-free preferential access. Not being LDCs, Botswana, Mauritius, and South Africa do not benefit from this facility.

Although considered as a handicap by some, the yarn-forward rule of origin should, in fact, be regarded as an opportunity for African countries to engage in the beneficiation of their cotton and, therefore, develop the industrial base in this sector.

There is, however, a quota on the use of the duty-free benefit to the U.S market. The quota is capped in the first year to 1.5% of the total value of all apparel imports into the U.S. This cap will increase annually up to 3.5% at the end of year eight. The cumulative value of duty-free exports guaranteed is thus estimated at $15 billion over the eight years of AGOA.

As happened with the Lomé agreements, AGOA provides an opportunity to promote investment particularly for Asian industrialists to invest in the region for the production of textile fibres, fabrics and clothing, using quota free and duty free access to the American market from Africa as the strongest incentive.

SADC Trade Protocol's Textiles and Clothing Provisions

The SADC Trade Protocol was supposed to be operational by 1 September 2000 but technical and administrative problems still had to be solved. In some countries like Zimbabwe, its operationalization has been postponed until a later date. Negotiations are continuing about some topics such as the consolidated text on the rules of origin, the dispute-settlement mechanism, the sugar-cooperation agreement, and the textiles and clothing agreement.

Trade liberalization for textile and clothing products in the context of the SADC Trade Protocol has been most controversial; and its implementation is still being negotiated among Member States. The reason for this is the paramount importance the sector has for all SADC Member States in terms of industrialization, employment, foreign-exchange earnings, and budgetary revenues.

The opening up of the U.S. market for SADC exports of textile and clothing products under AGOA, in force since late 2000, has brought new urgency for textiles and clothing trade liberalization within SADC. Only through a bold trade dispensation within SADC can member states provide the most conducive environment to overcome supply-side constraints and develop sufficient competitiveness to benefit fully from the AGOA opportunity. Intra-SADC trade liberalization and AGOA complement each other in the case of textiles and clothing, the single most important sector that can derive major and fast benefits from AGOA. The special preferences provided by AGOA to SADC's LDCs expire in September 2004. This imposes great urgency to agree on trade liberalization within SADC and on a regional strategy for textile and clothing products, if the risk of losing the benefits provided by AGOA is to be averted.

Under the SACU-MMTZ arrangement, SACU agrees to grant the textile and clothing exports from the SADC countries of Malawi, Mozambique, Tanzania and Zambia (MMTZ) access to the SACU market, within quota levels, at zero tariffs. Within the quotas, MMTZ exports are granted an exemption till 2005 from the two-stage transformation requirement.

SACU made the duty-free treatment of MMTZ exports into SACU under the MMTZ arrangement conditional on MMTZ countries granting market access to specified exports from Botswana, Lesotho, Namibia and Swaziland (BLNS) to MMTZ beyond that contained in MMTZ countries' differentiated offers to SADC (except South Africa). The MMTZ countries and SACU agreed that the tariff treatment for textiles and clothing products within quotas should be duty-free.[24] Unfortunately, it is unclear whether the parties agree on the rules of origin governing textile and clothing trade under the SADC Trade Protocol. South Africa has gazetted that SADC Trade Protocol preferences are granted for imports qualifying

[24] record of 11th Meeting of Ministers, Lake Centurion, Pretoria, 19 March 2001, point 57, p. 20

under the two-stage transformation rule. MMTZ countries have been granted a waiver from this requirement until 2005. However, it seems that non-SACU member states consider the Rules of Origin as not yet agreed upon.

The quota limits proposed by SACU under the MMTZ arrangement and applicable from 2000 to 2005 are not accepted by the MMTZ countries. Malawi, Mozambique and Zambia made counterproposals and asked for annually growing quotas. Furthermore, non-LDC SACU countries will be eligible for AGOA only if they source the necessary inputs from sub-Saharan AGOA-eligible countries (including the MMTZ countries) that have ***approved visa systems*** (Annex 4, p. 126). However, the quota limits under the MMTZ arrangement only refer to products consumed in the SACU market and not re-exported directly or embodied in an item subsequently exported from SACU.

"SADC intends to use the trade dispensation for textile and clothing products under the SADC Trade Protocol to ensure an integrated supply chain—fibre-yarn-fabric-garments—within SADC, thereby increasing the SADC Member States' international competitiveness" in this sector. But the quota levels under the SACU-MMTZ arrangement are so small as to be incoherent with the goal of creating the foundation for integrated supply chains for an internationally competitive textile and clothing sector in SADC (SADC 2001:4) (see Arrangements under the SADC Trade Protocol: How Far an Advance? p. 76)

SACU has not conceded the request of Mauritius and Zimbabwe for access to its market for man-made fibres and fabrics on the basis of single transformation. However, SACU agreed, in principle, to offer accelerated tariff reduction to the rest of SADC (thus, Mauritius and Zimbabwe) for textiles and clothing exports fulfilling the double transformation rules of origin. SACU also indicated that the SACU-internal discussion on the possibility of accepting single-stage transformation for textiles and clothing products containing man-made fabrics is ongoing.[25]

South Africa stressed that single transformation for textile and clothing products must remain restricted to the minimum and allowed only in such cases where a viable alternative is not at hand, for the time being, i.e., for the MMTZ countries. South Africa tries to justify this by pointing out that the AGOA preferences are subject to a triple-transformation requirement, with the exception of, as far as SADC countries are concerned, MMTZ, Lesotho, and Swaziland for whom single transformation is acceptable until September 2004 (Annex 4, p. 125).

Serious disagreements remain, moreover, between South Africa and some textile- or clothing-producing SADC countries (notably Tanzania, Mauritius, Malawi, and Mozambique) over the rules of origin to be applied in the clothing and textile sectors. South Africa is concerned that some SADC countries import their materials and components from Southeast Asia and that, after a one-stage transformation, such products could be exported to South Africa at the preferential tariff rate accorded to SADC members. This could undermine South Africa's local textile and clothing industry. For this reason, South Africa and the BLNS have tabled a proposal at the June 1999 SADC Trade Negotiating Forum in Botswana that products in this sector need to undergo a two-stage transformation to be considered a local product. In other words, raw materials need to be converted into textiles, and textiles into clothing in a SADC country, before these may enter South Africa as goods originating from a SADC country.

Textile and clothing products from the MMTZ countries need only undergo a single stage transformation to benefit from import tariff cuts by South Africa. This, however, will only last for three years, after which they will need to prove that at least 45% of the value of a product has been added domestically.

[25] ibid., points 68 and 69, p. 23

Sub-Saharan Textiles and Clothing on the World Market

Africa has been a traditional producer of cotton, however, it does not appear as a significant processor of raw cotton into semi-finished and finished products. Indeed sub-Saharan Africa accounts for less than 1% of world exports of textiles and clothing in 1995. Sub-Saharan Africa's exports grew by an annual average of 5.4% during 1990-95 to $1.7 billion, two-thirds of which consisted of apparel. Mauritius and South Africa together generated three-fourths of those exports in 1995. The primary market for the region's exports of textiles and apparel has been the EU, accounting for just over one-half of the total in 1994. The United States followed with just under one-fourth of the total.

Of the sub-Saharan Africa countries currently competing in the global market, South Africa has the largest textile and apparel sector ($2.0 billion), followed by Mauritius ($288 million), and Zimbabwe ($236 million). Mauritius stands out since the sector accounts for 45% of its manufacturing value added.

Mauritius has the most developed, export-oriented apparel industry in sub-Saharan Africa, exporting quality apparel all over the world. Sector imports from Mauritius by the U.S. increased from $191 million in 1995, to $244.9 in 2000.[26] Mauritius was among the top ten suppliers of T-shirts to the EU in 1999. The price competitiveness of Mauritian sector goods has declined recently because of rising labour costs brought on by a tight labour market. As a result, some Mauritian manufacturers have shifted part of their operations to neighbouring Madagascar. Sector imports by the U.S. from Madagascar, which has a low-cost, relatively skilled workforce, rose from less than $1 million a year in the early 1990s to $109.9 million in 2000.[27]

U.S. textile and garment imports from South Africa have grown rapidly since 1991, when the United States lifted the trade embargo imposed against South Africa under the Comprehensive Anti-Apartheid Act of 1986. Imports rose from $1.5 million in 1991 to $175.5 million in 2000;[28] the pre-embargo peak was $55 million in 1985. South Africa is the largest producer of textiles and clothing in sub-Saharan Africa, but it exports only a small share of its production.

Trade sanctions on South Africa encouraged its textile and clothing manufacturers to shift export production to neighbouring Lesotho and Swaziland. As a result, Lesotho's exports of textiles and clothing to the U.S. increased from negligible levels in the mid-1980s to $27 million in 1991 and $52 million in 1992. This surge led the U.S. to impose quotas. With the imposition of the quotas and the lifting of the U.S. trade embargo on South Africa, these exports to the U.S. levelled off at slightly more than $60 million during 1994 and 1995 before leaping to $140 million in 2000. Swaziland's exports of textiles and apparel to the U.S. more than doubled between 1991 and 1994, rising to $15 million, and reached $31.9 million in 2000.[29]

Prior to the AGOA legislation, the U.S. International Trade Commission considered "that nine countries are considered to have the potential to expand exports of sector goods to the United States" of which Botswana, Malawi, Mozambique, Tanzania, and Zambia are SADC member countries.[30]

Right from 1983, the nine member states of Southern African Development Coordination Conference (SADCC), the precursor of SADC, earmarked textiles as a key sector for the region's industrial development. Twenty-one of 88 projects listed by SADCC concerned

[26] U.S Trade and Investment with Sub Saharan Africa. http:// reportweb.usitc.gov/africa/by _country.jsp
[27] Idem
[28] Idem
[29] Idem
[30] Inv. No. 332-379, USITC Publication 3056, September 1997

textiles, namely polyester yarns, knitting projects, "powerlooms", "wool and mohair" and textile chemicals production.[31]

In 1989, SADCC commissioned an intra-regional textile study focussing on how to achieve regional self-sufficiency. The report concluded *inter alia* that the optimization of the textile industry's resources could become a reality only if SADCC were to coordinate and encourage efforts to increase intra-regional trade more than through mere bilateral or trilateral trade agreements (Bureau Technique de Conseillers Industriels 1989).

The report was also pessimistic as to the regional market itself, concluding that while the region's population will increase from 70.6 million in 1985 to 111.9 million in 2000, the fibre consumption per capita will not increase from the 1.10 kg level of 1985. No data is available to evaluate this forecast. The region now includes Mauritius, Seychelles, South Africa, and the Democratic Republic of the Congo, which it previously did not. Economic development and rising income determines the size of market consumption for clothing and textiles. Thus, the number of outerwear garments purchased in the United States increased from 14.3 to 28.7 per capita between 1967 and 1995. Estimates for China 1995 is two per capita (AAMA 1996:7). SADC region produced 807.9 million garments in 1999 (Table 5). South Africa and Mauritius together produce 613.0 million or 76% of SADC's total. With the population at 200 million in 1999, SADC's clothing producers also have their own market as immediate opportunity.

Conclusion

For the SADC textiles and clothing sector, the countdown is ***year 8 minus 1*** with ***year 4 marking halftime!*** The year 2008 is a turning point for the EU-ACP agreement, the SADC Trade Protocol, the EU-South Africa Free Trade Agreement, and AGOA. The phasing out of the Multifibre Agreement and the Agreement on Textiles and Clothing in 2005 needs to be followed carefully lest the developed countries attempt to reinforce non-tariff barriers for access to their markets. Under AGOA, 2004 brings the full application of the yarn-forward rule for all eligible exporters to the U.S. market.

Since the American and European markets dwarf those in the SADC region, SADC countries must adopt a global vision, jettison protectionist barriers, and create a liberal trade regime conducive for global competitiveness. Time, a collective strategic approach, action at both national and regional levels, and a commonality of purpose between the private and public sectors are vital if the region does not want to miss the emerging new opportunities just like the ACP countries, except Mauritius, largely failed to penetrate the EU market despite successive Lomé preferences.

[31] SADCC Industrial Workshop proceedings, Harare Zimbabwe 10th and 11th January 1984

Structure and Performance of the Textile and Clothing Sector in SADC

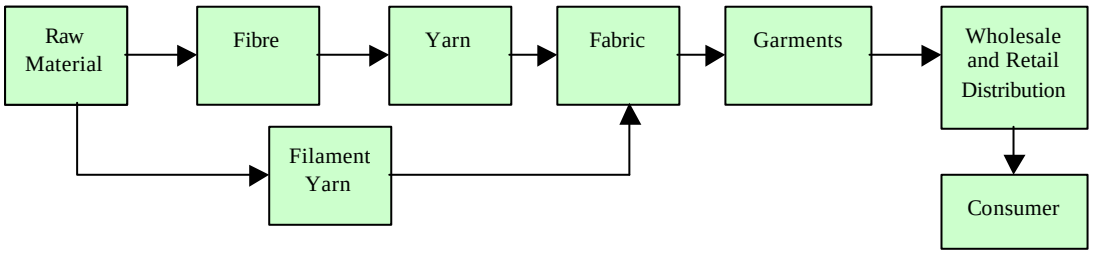
The manufacturing and textile industries are important economic sectors in SADC capable of being engines of growth as a result of the market opportunities discussed in the previous section. To understand how these sectors can be developed we first present an overview of the garment supply chain and some of the significant changes that it has undergone that will affect SADC suppliers. Following that, we review the current state of the textile and clothing industries in the SADC region. This review includes the size of various sub-sectors, current capacity utilization, and the major constraints on capacity utilization. We then report on the competitiveness of the industries in the SADC member states in terms of cost, delivery and quality. Using this data, we analyse which countries have competitive advantages in the different sub-sectors of these industries.

Subsequent sections of this report discuss the strategies and actions both the public and the private sectors should take to ensure the SADC textile and clothing sectors can be effective competitors in the international marketplace.

Overview of the Garment Supply Chain

The textile and clothing industries are part of a pipeline that takes raw materials and delivers finished garments to consumers. The pipeline is complex and multi-faceted; and generalizations are difficult to make and often dangerous to use. In this section, we describe the features of this pipeline that are important for understanding the significance of the textile and clothing industries in SADC and how these industries can compete in regional and international markets.

Figure 1:*The garment delivery pipeline or supply chain*[32]



Apart from the changes in the international markets discussed in the previous section three major changes have occurred in the way garments are manufactured and distributed since the end of World War II. These changes have consequences for the SADC region as it expands its reach into the international market place.

The first change was a result of increasing competition as the shattered economies in Europe and Asia began to rebuild after WW II. Garment manufacturers in the U.S. found

[32] Raw cotton also has to be ginned to remove seeds and other material before the fibre can be processed. Man-made fibres are made from chemical feedstock. Man-made staple fibre is similar to raw natural fibre and is spun into yarn. Man-made filament yarn is not spun from fibre but manufactured directly into yarn. Filament yarns are usually *texturized* or processed in some way before they are woven into fabrics.

themselves facing low cost competitors and, to compete, introduced industrial engineering techniques[33] to lower labour costs and increase throughput. This process had started before the war and was refined during the war in response to wartime production needs. Competitive pressures, however, caused industrial engineering to really take off and become one of the main focuses of improvement in garment manufacturing until about 1980.

The second change was the shift in economic power in the supply chain from the manufacturers to the retailers. The change resulted, in part, from the recognition that the most important information in the supply chain is what consumers want to buy, when they want to buy it, and what they are willing to pay. As the retailers are closest to the consumers, they have the best access to that information. Changing consumer tastes make this information even more valuable as garment supply chains need to target products at an increasingly segmented market. Technological innovations have enabled retailers to better understand consumer demand and, as a result, insist their suppliers respond more specifically and quickly to these changing demands. The garment industry in the United States—no longer able to compete on price or quality—began to re-organize itself in the mid-1980s with a series of strategies collectively known as **Quick Response** (Box 5, p. 82)**.** These strategies created supply chains that were more efficient and responsive to the consumer.

The third change was a dramatic increase in the speed at which textile products are manufactured. New spinning and weaving technologies introduced in the '60s and '70s have increased average production speeds six fold. At the same time, quality has dramatically improved, and fabric defect rates under 5% are considered the norm—half of what was accepted 30 years ago. Without these new technologies, a textile manufacturer cannot hope to compete on price, delivery, or quality in the world market.

What are the consequences of these changes to SADC manufacturers? Whereas, over a 50-year period, U.S. garment manufacturers gradually adapted industrial engineering and later made the transition to Quick Response, SADC garment makers will have to undergo a *double-transformation*. To be competitive they will have to *(i)* introduce industrial engineering into their factories and *(ii)* become Quick Response enabled, now. Whereas U.S. textile manufacturers who had time to install the new technologies as they were developed, SADC textile manufacturers must leap into the new technologies, if they have not already done so, because mills with old equipment will not find a market.

Nature of Textile and Garment Production

The garment supply chain is composed of distinct production stages, each with unique characteristics affecting the ability of the industry in each country to respond to changes in their markets as a result of the new trading regimes. These characteristics are:

- energy usage
- water usage
- labour intensiveness
- capital intensiveness
- lead time to bring a new operation into production

[33] The industrial engineering techniques most frequently used in the garment industry are work methods improvements and time studies. Together these techniques apply detailed time and motion studies to reduce the time taken for each operation.

The different production stages show a large variation in these characteristics (Table 3). These characteristics are important in determining where market opportunities can be developed and may indicate barriers that require public-sector initiatives and policy changes.

Table 3. *Characteristics of textile and garment production stages*

	Energy Usage	Water Usage	Labour intensity	Capital Intensity	Lead time for new production
Natural fibre preparation	low	little or none	low	low	moderate
Man-made fibre production	moderate to high	moderate to high	low	high	long
Yarn texturising	moderate	low	low	moderate	moderate
Yarn spinning	moderate	little or none	low	moderate	moderate
Yarn dyeing	very high	very high	low	high	moderate
Fabric formation	high	moderate	low	high	long
Fabric finishing	very high	very high	low	high	long
Garment production	low	low	high	low	short
Garment washing	moderate	high	low	moderate	short

Significance of the Clothing and Textile Sectors in the Region

Garments are always an important sector in any economy, especially if their distribution, wholesaling, and retailing are included. As discussed in the section on "Scope and Limitations for Regional Strategies to Increase Regional Inter-industry Linkages", wholesale and retail distribution represents around 75% of the value added in the garment supply chain; and, with few exceptions, nearly all retail sales are local.[34] This is important when considering policies to improve the sector; and we will come back to it when we discuss the way forward.

The manufacture of textiles and garments creates jobs and value-added too. In many economies in the region, it is also a major source of exports and foreign investment. Unfortunately, the project team had difficulty gathering recent, comprehensive data on total output and employment in these industries. This information is critical for rational policy-making and investment decisions. The section on "Information" discusses what needs to be done to improve the availability of this data.

For those countries from which recent (1999 or 1998) data is available, the Mauritian textile and clothing sectors are by far the largest. In 1998, these sectors contributed 26% of its total GDP and represented 72% of manufacturing employment in 1999 (Table 4). These sectors represent more than 10% of manufacturing employment in Tanzania, South Africa, Zimbabwe and Botswana, and, in Lesotho, nearly 7% of GDP[35] and 58% of exports. They can play even larger roles in the regional economy given the potential for expanding exports under AGOA and Lomé/Cotonou plus the potential to expand intra-SADC trade under the SADC Trade Protocol.

Most textile and clothing manufacturing in the region is privately owned. Only four countries— Malawi, Mozambique, Tanzania and Zambia,—have any significant public

[34] As an example of non-local retail sales, many Swazi and Basotho buy their garments across the border in South Africa. Another example is international catalogue orders, which currently are insignificant in the SADC region.

[35] The Lesotho percentage includes footwear.

ownership in these sectors. These countries are privatising most of the remaining publicly held firms; and none reported any plans for direct public investment in this sector. These are also the countries that have among the lowest capacity utilization and many idle plants (Table 2). These are also the MMTZ countries. Seemingly, SACU's offer of special access under the SADC Trade Protocol (see section 4) for these countries should encourage investment to complete the privatization of firms and revitalize the underused capacity.

Unfortunately, as discussed in the section on Supply Potential of the SADC Textile and Clothing Industries, the quotas are **pathetically small** and will have **little effect.** Furthermore, the quotas do not, in some cases, represent the comparative advantages of each country and, thus, their potential for increasing exports (see section on "Comparative Advantages within SADC: Strengths and Weaknesses of the Supply Chain".) For example, Zambia, which has clear competitive advantages in textile production, has an annual quota for cotton fabric of merely 1,700 tonnes, which is less than the capacity of the currently idle Kafue Textile Mills. Tanzania, which theoretically has a greater advantage in garment production than textiles, has a quota of only 500,000 garments per year.

Table 4. *Significance of the textile and clothing sectors in SADC*

	Textile and clothing sectors			
	Percent of GDP	**Percent of manufacturing employment**	**Percent of total exports (value)**	**Significant public-sector ownership**
Mauritius	26 (1998 est.)	72 (1999)	65	
Lesotho	6.9	n.a	58.3 (1998)	
Botswana	n.a.	38	4 (1998)	
Tanzania	n.a.	24.0	3	yes
Zimbabwe	n.a.	16.0 (1998)	n.a.	
South Africa	2.9	14.5	n.a.	
Zambia	1.8	1.0 (1997)	4 (1997)	yes
Swaziland	n.a.	n.a.	9	
Mozambique	0.2	1.4 (1999)	2.1 (1998)	yes
Namibia	n.a.	n.a.	< 1	
Malawi	n.a.	n.a	n.a.	yes

Source: Country Reports
Note: n.a. = data not available. Countries are listed in approximate order of the significance of the textile and clothing sectors in their respective economies based on percent of manufacturing employment, or percent of total export value. Comparative data for Malawi is not available.

The Pipeline[36]

In 1999, the last year for which comprehensive data is available, the SADC region was a net exporter of cotton fibre and a net importer of yarn and fabric. A shortfall in man-made fibre and filament-yarn production is met by imports of fibre, yarn, and fabric made from these materials.

[36] The data for this section is for 1999 unless otherwise stated and was almost entirely taken from *The SADC Textile Markets: Executive Summary* available on the TIMSSA web site www.timsaa.co.za, accessed on 22 June 2001.

Fibre

Total fibre production in the region was 560,500 tonnes comprising:

- cotton 300,000 tonnes
- wool and mohair 31,000 tonnes
- others, mainly man-made fibres 230,000 tonnes

Consumption of fibre was 436,700 tonnes of which cotton was 155,000 tonnes, implying a net export of nearly 145,000 tonnes of cotton.[37] Consumption of all other fibres was 281,700 tonnes against a production of 261,000 tonnes implying a net import of nearly 22,000 tonnes, the bulk of which are man-made fibres.

Yarn

Yarn spinning consumed 243,000 tonnes of fibre to produce 225,000 tonnes of yarn.[38] Non-woven fabric production (such as filters, carpets, non-woven blankets) consumed 60,000 tonnes. This leaves about 134,000 tonnes of fibre used for other purposes such as insulation, mattress and bed filling, consumer products (e.g., sanitary towelling and industrial applications).

Fabric

Woven broadcloth fabric production consumed 125,500 tonnes of yarn. Another 70,000 tonnes of yarn was used for knit fabric production, most of which presumably was used for apparel. The authors have no data on yarn imports into or exports from the region. Assuming such imports are small,[39] the remaining 30,000 tonnes of yarn produced in the region was used to make towels, blankets, carpets, narrow fabrics, packaging, cordage, netting, and industrial products such as tyre cords.

Total woven fabric production was 600.5 million square metres (m^2), of which 345 million m^2 was apparel fabric. The remaining 255.5 million m^2 was used to make bed linen, furnishing fabrics and tarps and tenting. The average weight per square metre of all woven fabric produced was, therefore, 209 grams. The average weight per square metre of all fabric, woven and knitted was 181 grams.[40]

Garments

TIMSAA reported garment production by sub-sector and by country. The total for SADC was 807.9 million garments (Table 5), but the total for all sub-sectors was 780 million. As the data by sector includes fabric consumption, we will use the 780 million figure. These 780 million garments consumed 1,130 million m^2 of fabric, broken down as follows:

- woven apparel fabric consumption 652 million m^2
- circular and warp knit apparel fabric consumption 477 million m^2

[37] Some cotton may have been stored for consumption in future years.

[38] Yarn spinning wastes about 10% of the ginned cotton fibre, and about 5% of man-made fibre.

[39] This may not, however, be a good assumption since Mauritius used 22,000 tonnes of yarn for circular knits, almost all of which was imported.

[40] Total knitted fabric consumption for garments was 477 million square metre equivalents, consuming 70,000 tonnes of yarn. Adding these figures to the 125,500 tonnes of yarn consumed to produce 600.5 million square metres of woven broadcloth gives a total of 1,078 million square metres of fabric and 195,500 tonnes for an average weight of 181 grams per square metre.

The SADC region has a **huge shortfall** in woven fabric production for apparel. In 1999, total production was only 345 million m² against a consumption of 652 million m², resulting in a shortfall of **307 million m²!** Since yarn production is, at best, balanced with weaving and knitting demand, a large increase in production in the weaving and spinning sectors will be required to enable the region to export more garments that, under AGOA, **must** be made from regionally spun yarn and fabric or, under ACP/EU, from regionally made fabric.

In addition to the fabric-based garment industry, regional manufacturers also produce knit-to-shape garments. A total of 36.2 million sweaters were produced using 19,650 tonnes of yarn. For this, some fancy yarns, particularly cashmere, are imported while much of the wool and acrylic yarns are made locally.[41]

Table 5. *SADC garment production by country, 1999*

Country	Million units	Country	Million units
Angola	neg.	Swaziland	14.5
D.R. of Congo	neg.	Botswana	16.0
Seychelles	neg.	Malawi	27.5
Zambia	0.5	Lesotho	54.0
Namibia	1.5	Zimbabwe	61.5
Mozambique	9.4	Mauritius	149.5
Tanzania	10.0	South Africa	463.5
		Total	***807.9***

Source: TIMSSA (2000) and, for Mozambique, Coughlin (2001:4)
Note: neg. = negligible

The other group of knit-to-shape products is hosiery. Pantyhose production totalled 60 million pieces using 1,200 tonnes of yarn. Sock production was 84 million pairs using 4,250 tonnes of yarn. Continuous filament nylon yarn is the main yarn used in hosiery production. This yarn is produced mainly in the region.[42]

No comprehensive data is available from publicly accessible sources on the total garment imports into the region. Total employment in the garment sector in 1999 was 266,500.[43]

Capacity

The 11 member states in the SADC Trade Protocol have a wide variation in the size and structure of their clothing and textile industries. In nearly all countries, production capacity has been established in response to specific trade arrangements. For example, Mauritius has developed a successful garment industry based on its ability to sell garments duty- and quota free to the European Union under the Lomé agreement. Garment and textile operations in countries such as South Africa, Zimbabwe, and Zambia were originally established as import substitution industries when trade embargoes or protective duties and trade regimes were in

[41] For the production of knitted fabric, the only available data is in tonnes. Hence, we know the resulting yarn consumption but cannot estimate the consumption of woven fabric for apparel in square metres without making a wild assumption about the average weight of fabric per garment.

[42] Osman (2000:18) reported that, in 1997, capacity for nylon-filament-yarn production in South Africa was 20,000 tonnes per year; and local consumption was about 10,000 tonnes.

[43] No comprehensive data on employment in the textile industry was available.

place. Now, the challenge for the industries in all countries is to respond to opportunities offered by the new trading regimes.

Only four countries in the region were able to provide data on production in their textile and clothing sectors. In most cases, however, data on the export values are available though the latest is for 1999 or sometimes only 1997. To calculate the capacity available for additional export production we divide the existing export values by the current rate of capacity utilization estimated by our survey.

The survey asked manufacturers for their current hours of operation. The assumed maximum hours of operation was 168 for the textile industry and 60 hours per week for the garment industry. Current rate of capacity utilization for each firm was thus the current hours of operation divided by the maximum. To obtain industry-wide estimates for capacity utilization, rates for each firm were weighted by the percentage of total employment they accounted for in the sample of firms for that country. The manufacturers were also asked how much more production they could achieve with the existing machinery and workforce if there were abundant sales orders and there were no difficulties in getting supplies, and how much they could increase production using the **existing shifts** and **machinery** if **more labour** were available and all the above constraints were removed. That rate of capacity utilization adjusted downward if the factory used less than the maximum number of hours is what this report uses to calculate overall capacity in each country.

Table 6. *Exports-actual (1999) and potential capacity*

	Garment Manufacturing					Textile Manufacturing				
	Exports (million $)	**Production** (million $)	**Capacity utilization** (%)	**Potential exports** (million $)	**Potential production** (million $)	**Exports** (million $)	**Production** (million $)	**Capacity utilization** (%)	**Potential exports** (million $)	**Potential production** (million $)
Tanzania	3.41	n.a.	84	4.05	n.a.	16.5	n.a.	68	24.2	n.a
Mozambique	7.8	7.8.	67	n.a.	11.7	n.a.	5.5	32	n.a.	17.3
Mauritius	1,097.0	n.a.	83	1,322.0	n.a.	n.a.	1,680.0	93	n.a.	181.0
Zimbabwe	41.9	n.a.	36	116.4	n.a.	144.8	n.a.	87	166.4	n.a.
South Africa	1,020.0	n.a.	77	1,325.0	n.a.	2,600.0	n.a	64	4,063.0	n.a.
Malawi			63					59		
Lesotho	100.8	n.a.	68	148.2	n.a.	0.2	n.a.	n.a.	0.2	
Swaziland (1998)	64.5	n.a.	73	88.4	n.a.	25.4	n.a.	n.a.	n.a.	n.a.
Namibia		n.a.	41							
Botswana	56.4	n.a.	60	94.0	n.a.	5.2	n.a.	n.a.	5.2	n.a.
Zambia	0.4	n.a.	22	2.04	n.a.	37.0	n.a.	62	59.7	n.a.
Total	**2,384.5**	**7.8**		**3100.1**	**11.70**	**2831.1**	**173.5**		**4379.4**	**198.3**

Source: the project's country studies

Note: As no data was available on capacity utilization for the textile industry in Lesotho and Botswana, it is assumed no capacity increase is possible. For these countries, potential exports are set equal to actual exports.

Even with the difficulties with the data, it is clear that substantial idle capacity for garment and textile export production in the SADC region exists. The total reported garment exports in 1999 equalled $2,384 million; and textile exports, $2,830 million. Adding the production figures for those countries not reporting exports gives $2,392 million for apparel and $3,003 for textiles.[44] Using the estimated capacity utilization from the country studies, this could be expanded, without additional machinery, by about 30% to $3,112 million for garments and by 52% or about $4,578 million for textiles.[45] This is an increase, without additional machinery, of $718 million for garments, and $1,575 million for textiles. To put this in perspective, Africa exported garments worth $336 million to the United States in the first six months of 2000. Extrapolating that for the full year would be $672 million (MUSBA 2000: 5). The quota under AGOA for 2000/2001 is worth approximately $902 million (Table 37). The conclusions are: *(i)* the region does not have the sufficient unused capacity in currently operating firms to increase garment production to quickly take full advantage of the increased export opportunities under AGOA; and *(ii)* the region may have unused capacity in existing textile firms to supply the increased requirements for yarn and fabric to garment manufacturers based on the requirements for AGOA.[46]

The apparently large capacity for increasing ***textile*** production is extremely important for AGOA, as two of the largest garment exporters in the region, Mauritius and South Africa, and one important exporter, Botswana, immediately need yarn and fabric made in AGOA-eligible countries **having approved visa systems** (Annex 4, p. 126). All countries in the region will need such yarn and fabric after September 2004 in order for their garment exports to the U.S. to be duty-free. Since, as discussed in the section on The Pipeline, the region is a large net importer of fabric, all the increase in new fabric and yarn production to meet the AGOA-eligibility requirements must come from new spinning, weaving, knitting and fabric finishing capacity. Fortunately, much extra capacity exists but is currently idle in many mothballed factories throughout the region and can be brought on-stream more quickly than creating new capacity from scratch. For example, in Zambia, Kafue Textiles has been closed for five years and is awaiting privatization. When it was fully operational, it produced 18 million metres of fabric per year.[47] Many other plants for both textiles and clothing are idle in Mozambique, Malawi and Tanzania.

Although the spare capacity for ***garment*** production may not allow the region to fully exploit the trade benefits under AGOA, the good news is that the development of garment capacity requires much less capital and shorter lead-times than yarn production.

Is this the right capacity? Can these factories produce what is needed, at the right price and quality, and deliver the goods when the customers want?

---

[44] Mauritius is the major contributor to the additional textile production. Nearly all this fabric is used to produce garments for export, so it is reasonable to include it in the estimates of exportable fabric production. Mozambique is the only country for which garment production, not exports was reported. Mozambique's production is only a small percentage of the total, and therefore, the assumption that production equals exports will not significantly affect the calculations, nor the conclusions.

[45] To calculate the estimated potential capacity, we divided the export and production values by the reported percent capacity utilization.

[46] Another way of calculating this potential is to look at the total production of apparel fabric in the region, which was 345 million square metres (see section on The Pipeline). If we assume this capacity can be increased by 52%, this equals an additional 179 million square metres. Africa exported 77 million square metres equivalents of garments to the U.S. in 1999 using African origin yarn and fabric. Combining this with the potential increased production based on unused capacity gives a total of 256 million square metre equivalents, which is slightly more than the AGOA quota for 2000/2001 of 246.5 million square metre equivalents (Table 36.)

[47] interview with Kafue Textiles's managers, November 2000. Assuming an average width of 150cm, this is 27 million square metre equivalents.

These questions are much more important for the textile than the garment industry. Garment operations are generally far more flexible than textile operations. A garment factory can, in many cases, switch the type of product it makes without much delay and with minimal capital investment. A textile factory, on the other hand, can often only process certain kinds of fibre or produce yarns of a given type or within a narrow weight range, or produce fabrics that are limited by width, and weight, and finish. Furthermore, outmoded equipment can rarely produce yarn and fabric of the quality and at the cost demanded in export markets.

The project team did not gather comprehensive data on the nature of the **installed capacity** in the textile and clothing industries in the SADC countries. Collecting such data was far beyond the scope of the present study. Anecdotal data from our visits to specific plants indicates, however, that at least some of the installed capacity, in use as well as idle, may be suitable for producing many of the yarns and fabrics the SADC garment industry will need.

The potential to install **new capacity,** on the other hand, is affected by *(i)* the lead-time for installation, *(ii)* the amount of capital required, *(iii)* the availability of factory shells, and *(iv)* the ease of and incentives for investment. The first two factors are characteristic of the industry; and the last two vary from country to country. Furthermore, as discussed in the section on Nature of Textile and Garment Production, each production stage has different requirements for inputs such as labour and electricity. It makes sense that investment in new capacity will occur where a factory can be competitive. In the following sections, we analyse the relative strengths and weaknesses of the region as a whole and of each country to see where the best opportunities for expanding capacity may lie.

Table 7: *Lead time and investment required for textile and clothing production*

Production process	Lead time to install production	Capital investment level
Yarn production-spinning	6 to 8 months	medium
Weaving and fabric finishing	1 year	high
Garment making	4 months	low
Circular knitting and automated hand flat knitting	4 months	medium
Hand flat knitting	4 months	low

Note: Lead-time for installing production assumes the factory shell is already standing. Capital investment is relative per employee.

Comparative Advantages within SADC: Strengths and Weaknesses of the Supply Chain

Since the textile and clothing industry is complicated and multi-faceted, it is difficult to generalize about it as a whole. A comparative advantage in one production factor, such as labour cost, does not necessarily result in an important comparative advantage in all production stages. Each production stage, however, is important since a manufacturer can only compete successfully as part of a competitive pipeline. The perspective adopted in this study is to consider the **region** as the potential supplier and evaluate the role each country's industry can play in developing competitive pipelines. Garment pipelines, in turn, compete not just on cost but also on response time, quality, and product range. As a result, the evaluation of the comparative advantages is not simply on a cost factor basis.

This study revealed major strengths and weakness of the SADC region's textile and clothing supply chain (Table 8). Analysing these shows the region has significant potential for developing efficient apparel-delivery pipelines. Important weaknesses also need to be overcome.

Two major strengths stand out. The region has many existing **world-class producers** of textiles and garments and can support the **entire pipeline** from cotton fibre to finished garments. The major weaknesses are: *(i)* shortages of experienced staff and adequate training facilities; *(ii)* poor intra-regional transport infrastructure; *(iii)* intra-SADC barriers to trade that make it difficult for firms in different countries to create efficient supply pipelines, and *(iv)* insufficient range and supply of man-made fibre and yarn as well as fabric made from these materials.

Table 8. *Strengths and weakness of the textile and clothing supply chain in SADC*

Strengths	**Weaknesses**
	Inputs
Abundant, good quality cotton	▪ Cotton is priced artificially high in Zambia. ▪ Cotton is pegged to world-market price, less overseas transportation and insurance costs, in other countries rather than allowing it to trade locally. ▪ South African cotton users must consume domestic cotton before they are allowed to import cotton. ▪ Ginning quality is not consistent. ▪ High internal transport costs ▪ Mozambique's cotton is poor quality.
Man-made fibre available in the region	▪ South Africa is the only producer of the man-made fibres used for apparel. ▪ The variety of what is produced in the region is limited. ▪ The total supply of man-made fibre in the region does not meet demand- raw fibre imports alone is 10% of consumption.
Cotton is often converted to yarn and fabrics in the countries in which it is grown.	▪ The capacity for yarn and fabric production is low and much of the cotton grown in the region is exported. ▪ The capacity that does exist is under utilised, mainly because of financial problems. ▪ The products are limited in range. ▪ Regional textile manufacturers have poor on-time delivery performance.
Low labour cost in some countries gives comparative advantage over other regions.	▪ Poor training and skills results in poor productivity. ▪ Labour costs are much higher in most countries than in non-SADC regional competitors, notably Madagascar ▪ Mauritius has labour shortages and imports workers from India and China, raising costs but increasing productivity
Mauritius has an effective guest-worker program for overcoming specific skill shortages and thus improving productivity	Restrictions on labour mobility within SADC
Cheap electric power in some countries	▪ Electricity is very costly in other countries ▪ Electric supply is unreliable in some countries
Zimbabwe, Zambia, Mozambique, Swaziland, Lesotho, and South Africa have abundant, cheap water for weaving, fabric and yarn dyeing and finishing, and garment dyeing and washing	Water is scarce, expensive and unreliable in parts of Namibia, Botswana, and Mauritius
Coal is available as an alternative to fuel oil for heating boilers (used primarily in weaving, fabric and yarn dyeing and finishing, garment washing and dyeing)	High intra-regional transport costs might offset cost advantages of coal in some cases.

Strengths	Weaknesses
As industry has reached critical mass in some countries, stockists carry most parts and supplies locally; and many are manufactured locally.	High dependence on overseas suppliers for machine parts, accessories, and miscellaneous supplies
Logistics	
Geographic proximity of yarn, fabric and garment producers reduces transport costs, lead times, and pipeline inventories	▪ High intra-regional transport costs can offset this advantage ▪ Poor roads lead to higher transport costs and delivery delays ▪ Delays in clearing goods at borders ▪ Mauritius is an island separated from the main continental producers
Durban and Cape Town are major ports, with frequent sailings and reasonable rates to all major markets and from main supply destinations	▪ Durban is congested and has frequent loading and unloading delays. ▪ Durban's ad valorem wharfage fees raise the cost of handling.
Walvis Bay has good road connections to the continental SADC countries and offers 10-day faster shipping to Europe and the U.S. than Durban, and cheaper handing charges. The trans-Kalahari and trans-Caprivi highways provide all-weather access to Walvis Bay for manu-facturers in Zambia, Zimbabwe, Botswana, and northern South Africa.	Sailings to and from Walvis Bay are much less frequent than those from Durban.
The Maputo Corridor will facilitate the use of Maputo as an alternate to Durban.	The port of Maputo is not very efficient and has infrequent sailings compared to Durban.
	▪ The region lacks regional feeder-services for intra-coastal shipping ▪ The ports of Beira, and Dar es Salaam are not reliable.
Most countries have good, reasonably priced telecommunications, and internet services.	Some countries have poor, or expensive telecommunications, and unreliable internet access.
Many South African retailers have implemented world-class merchandising, and sourcing systems, including Quick Response programs.	▪ Distribution systems in the region are still antiquated, slow and expensive ▪ Most retailers in the region are far behind in implementing modern retailing systems
Policy and Trade Relations	
Countries such as Namibia, South Africa, Lesotho, Swaziland and Mauritius have attracted investors in the textile and clothing sectors	Countries such as Zambia frequently change the investment incentives making it risky and confusing for foreign investors to come to the region.
COMESA FTA membership for Mauritius, Zambia, Zimbabwe and Malawi facilitates trade among them.	Some potentially important regional markets and suppliers such as Mozambique, South Africa and Tanzania are not in COMESA
AGOA has made all the countries in SADC potentially able to export garments duty- and quota-free to the United States	▪ Zimbabwe, the most cost-effective supplier of yarn and fabric in the region, has failed to qualify as an AGOA eligible country. ▪ Only six SADC countries have had their visa systems approved making them eligible for the apparel provisions of AGOA.
Six least developed countries in the region may source yarn and fabric from anywhere in the world and still meet the rules of origin for AGOA.	▪ Three of the largest garment exporters—Mauritius, South Africa and Botswana—must source fabric and yarn immediately only from other AGOA-eligible countries or the U.S. to be able to benefit from AGOA preferences. ▪ The world-wide sourcing provision for least developed countries under AGOA expires in September 2004.

Strengths	Weaknesses
All the countries in SADC can export duty- and quota-free to Europe under the Lomé/Cotonou or South Africa-EU agreements	▪ The Lomé/Cotonou agreement expires in 2008. ▪ The fabric used must originate in an ACP country, the EU or South Africa
Others	
• Long history of garment and textile production in the region • Many world-class producers of fibre, yarn, fabric, and garments exist in the region.	Much of the textile and clothing industry was developed under protected or embargo trading regimes and management is weak in international marketing skills, and world-class manufacturing techniques.
• English is a common language, which facilitates labour mobility, intra-regional linkages, and marketing to Europe and the United States. • Mauritius is bi-lingual, French and English. French facilitates contact with some European markets and French fashion and design centres.	Mozambique is Portuguese speaking; and few people speak English. The movement of labour among SADC countries is highly restricted.
	Lack of training adequate training facilities in most countries limits the ability to develop skilled technicians, supervisors, and middle-managers.
Mauritius and South Africa have advanced design and product development facilities	A general lack of design and product development skills in most countries

Constraints on Capacity Utilization

Factors internal and external to a firm affect their capacity utilization and competitiveness. Overcoming these constraints is important not only for individual firms and each country's national industry, but also for the region to develop competitive garment-delivery pipelines. Textile and garment manufacturers in each country were asked to rate the relative importance of various constraints on capacity. These results are presented in the country reports. In this report we have summarized the results for the entire region. This summary provides an understanding of the importance of each constraint as a regional issue, highlighting those that may require regional co-operation to be overcome. The manufacturers' responses about capacity constraints are discussed in the following categories:

Supply constraints
- infrastructure constraints
- input constraints
- process constraints

Demand constraints
- local demand constraints
- international demand constraints

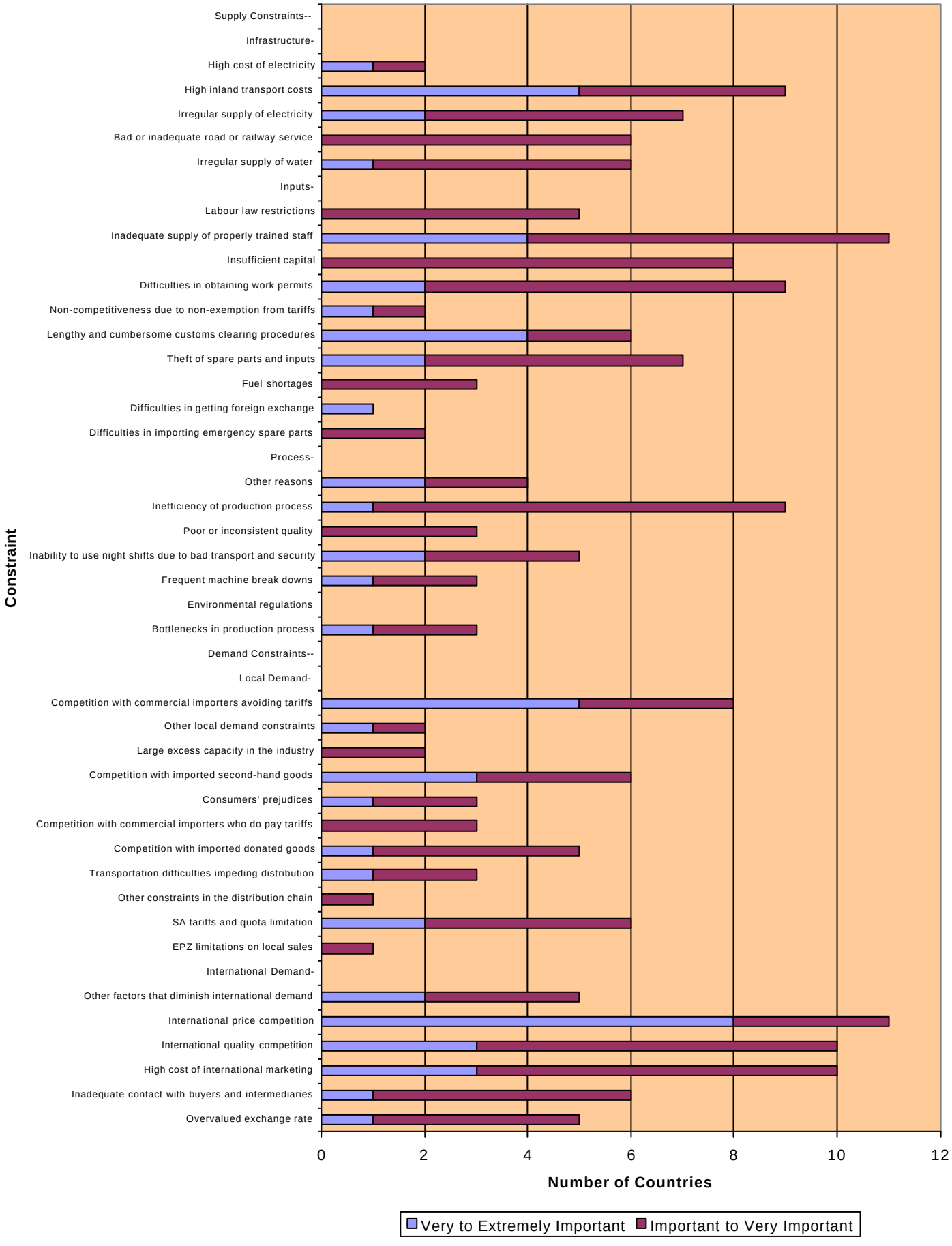
The constraints cited most frequently, in 10 or more countries, as being either very important or extremely important, were (see chart on page 29):

- international price competition
- international quality competition

- high cost of international marketing
- inadequate supply of properly trained staff

These results show that regional manufacturers, above all, feel they *(i)* face stiff competition in the international marketplace, *(ii)* have difficulty in finding customers due to the cost of marketing, and *(iii)* cannot fully utilize their capacity because the labour force is not well trained. The problem of price and quality competition is related to the problem of inadequately trained staff, as a manufacturer cannot be fully efficient or produce the best quality without good people. Evidence from the study supports these concerns. As a result, in setting priorities for action, alleviating these constraints should have top priority.

Capacity Constraints: Response for all Countries



Supply Constraints

Infrastructural Constraints. High inland transportation costs was the constraint that received the highest overall rating with firms in nine countries considering this to be between important and extremely important.[48] The other constraints due to infrastructural problems that are reported as at least important constraints in over half the countries are the irregular supply of water, bad or inadequate road or railway services, and the irregular supplies of water and electricity. The problem with costly and inadequate transportation is clearly a regional problem that needs to be addressed further.

Manufacturers in over half the countries in the region reported significant problems with inconsistent water and electricity supplies. Consistent electric supplies are essential for both garment and textile production. Voltage fluctuations and power cuts play havoc with production and cause quality problems. Water supplies are especially critical for fabric production, yarn dyeing, and garment washing—essential processes for the garment delivery chain. Those countries having problems with electricity or water supplies need to address them as a matter of urgency.

Input Constraints. Three input constraints stand out as important throughout most of the region: an inadequate supply of properly trained staff, difficulties in obtaining work permits, and insufficient capital. The lack of trained staff was reported everywhere. Solving this problem is critical if the regional industry is to be competitive. Although each country and indeed each firm will have to take steps to solve this problem, some regional coordination of training resources is essential. Scarce training resources in the region do not have to be duplicated in each country. SADC can play an important role by co-ordinating efforts to determine the exact type of training required and the most efficient way to offer it.

The problem of work permits is related to that of training. If properly trained staff are unavailable, expatriates are needed. Difficulties in getting work permits means that existing facilities will not be able to properly manage the operations. Potential investors will be wary of investing in a country where trained staff are in short supply and work permits are difficult to obtain.

Insufficient capital was not, on average, an 'extremely important' constraint but was a 'very important' one in all but two countries. In some countries, firms reported problems with short-term capital and in others long-term capital or both (Table 25) The most critical problems were for local firms who could either not obtain financing overseas, or could not obtain finance locally at reasonable rates. In most countries, locally owned firms would have

[48] Somewhat contrary to these perceptions, at least for South Africa, Naudé (1999:22–23) argues that, "as far as transport costs are concerned, domestic transport costs in South Africa are not *per se* problematic: South Africa's weaknesses are more in logistics management overall than the ***specific*** element of *transport costs*. Improvements in harbour management, taxes and coordination with trading partners, as well as overall logistics management by firms may be important in improving the competitiveness of South African exports. However, it … *international costs*, rather than domestic transport costs, is an obstacle to South African exports. For instance, the c.i.f.–f.o.b. band on imports (a crude measure of international transport costs) has been, on average, 0.07 (7%) in South Africa over the period 1988–1991. This compares very unfavourably with the world average of 0.03 [3%], and even the average for developing countries of 0.05 [5%]. Indeed, the international transport costs to and from South Africa are almost 50% higher [sic] than the average for developing countries!" Nevertheless, Naudé's econometric model revealed that, "although international transport costs are statistically significant in reducing South African exports, the magnitude of the effect is relatively small (the elasticity of changes in exports with respect to changes in international transport costs is around 0.08%)" *(emphasis added)*. This is not surprising. The extra international transport costs add only 3% to 4% to the c.i.f. cost of exports, a large but not damning amount. In interpreting his study, note that Naudé uses a very restricted definition of transport costs (c.i.f. minus f.o.b. costs) whereas our respondents were considering overall efficiency and costs of transportation.

trouble obtaining pre-shipment financing. In some, the pre-shipment financing was only for imported raw materials and not for the local value-added input. The problem of capital availability and cost is particularly strong in countries with high inflation and unstable currencies such as Malawi, Zambia, Zimbabwe, and Tanzania. Due to uncertainties about the future exchange rate and rate of inflation, banks charge exorbitant rates, all but stopping local firms from borrowing.

The other issue concerning capital is the problem of idle plants and plants waiting to be privatised. In many cases, these plants are idle or in need of privatization not simply because of lack of capital but because of lack of management expertise. In seeking investors for these operations, the government or other owners need to evaluate the specific needs of each firm besides money. For example, at one idle textile plant visited by the project team, it was clear the firm's main need was, in addition to new capital investment, expertise in marketing textile products. Its technical production expertise and general business and financial management skills were sufficient.

Theft of inputs, spare parts and, sometimes, finished products is also widespread in SADC and, indeed, throughout the world, especially in the garment industry. Different solutions exist; and the choice depends on the local situation. For example, in some countries, garment factories routinely frisk all employees when they leave work. In some factories, where the problem is theft from storage, a *single* person is held responsible for a store; and frequent audits limit the opportunities to steal.

In two countries, manufacturers felt that even when thieves were caught they were not properly punished. Except for this, confidence in the legal systems was otherwise high; and, in neither country, were the police considered corrupt or ineffective. Most of the garment operations were foreign owned; and it seems likely that the managers are not that familiar with the local legal requirements for evidence to obtain convictions. In such cases, it makes sense for the police and courts to assist the employers to understand what kind of evidence is necessary. The employers can then, in conjunction with the union or other employee association, set up procedures designed not only to limit theft but also to ensure the proper documentary evidence will be available in theft cases.

Lengthy and cumbersome customs procedures were cited as very or extremely important constraints in six of the 11 countries. This problem is discussed in detail in the section on "Tariffs, Other Taxes, Rebates, and Customs Regulations and Administration" on p. 51.

Political difficulties, fuel shortages and difficulties getting foreign exchange or emergency spare parts were isolated problems. Whenever political difficulties were mentioned in a country, they were deemed very or extremely important problems.

Process Constraints. The most widespread process constraint was production-process inefficiencies. In nearly all countries, this was related to the shortage of trained staff and the lack of adequate training facilities. This is consistent with the fact that only a few countries reported serious problems with machine breakdowns, indicating the machinery, except in isolated cases, was adequate, and similar results for production process bottlenecks. Poor or inconsistent quality was reported as between an important and very important constraint in only three countries. The other problems most frequently mentioned as causes of production inefficiency were those with raw material deliveries and raw material quality.

Demand Constraints

Local Demand Constraints. The most important constraints on local demand were related to competition from imports. By far the most serious, in the opinion of the manufacturers surveyed, was with importers who avoided tariffs. The second most important was competition with imported second-hand goods. These problems affect both the garment and

textile industries because reducing demand for locally-made garments often reduces the demand for locally-made fabric. Competition from imports is a problem for three reasons.

- **Lack of effective customs protection.** Customs is simply unable to enforce the regulations and impose duties on imported garments. Although this is a serious problem and needs to be addressed, more diligent customs enforcement on imports could create problems for manufacturers using imported raw materials. While demanding better enforcement against competing goods, they expect more liberal treatment for their imports. (In six out of 11 countries, the manufacturers considered 'lengthy or cumbersome customs procedures' a very or extremely important constraint [see chart on page 29]).

- **Failure of local firms to supply the demands of the market.** Responding to local shortages, importers bring in what customers want, while, in many countries, local manufacturers have apparently not discovered the markets in which they have a competitive advantage over importers. Since tariffs on clothing and textiles products are going to continue to decrease, local producers must find ways to compete locally if they wish to stay in that market. The primary advantage they have in the local market is access to information about what local consumers want. In some countries, consumers may prefer imported, *supposedly* superior garments. This was cited as a very important or extremely important constraint in only three countries. Rather than make excuses about why they cannot compete, manufacturers should find ways to develop proximity to the market as a competitive advantage.

- **Low consumer buying power.** Though competition with imported second-hand and donated goods was nearly as important a problem as smuggling, any policy to stem the flow of such clothing into the region would constitute a heavy tax on the meagre incomes of the bulk of the population in the region. Low consumer buying power results from the general state of the economy and can only be solved by raising the national income and ensuring it is equitably distributed.

International Demand Constraints. The most important constraint on international demand is price competition. The apparel market is extremely price competitive; and this response reflects that. All the factors that contribute to the cost of production affect the ability of regional producers to compete. One of the main points of this report is that barriers to regional trade need to be reduced to enable the region to be more cost competitive by enabling each stage of the apparel and textile production to be done where it is most cost effective.

International quality competition and the high cost of international marketing are close seconds as constraints on international demand. The high importance given to quality competition shows the awareness regional manufacturers have of the importance of quality in the international textile and apparel markets. The current study shows that, in general, local firms do not do badly either in terms of meeting customer requirements, or in absolute quality performance. They are, however, aware of their limitations and realize that they will have to do even better to be able to tackle some of the more demanding markets, such as Europe, the USA and Japan.

The high cost of international marketing is a major problem for regional firms. Those firms that are affiliates of foreign-owned companies, mostly from the Far East, do very little marketing and did not cite this as a constraint. In contrast, nearly all the locally or regionally owned firms deemed international marketing to be both costly and risky. Some countries

assist firms by subsidising attendance at trade fairs or helping them to organize local expositions. Although this is helpful, especially for small- and medium-size firms, the real need is for the factories to find buyers who want their products. The lack of contact with buyers and intermediaries was the constraint on international demand of third greatest importance and is clearly related to the problem of high marketing costs.

Toward this end, textile agents, who provide sourcing services for international buyers, are important intermediaries for local factories. Such agencies are well established in South Africa and Mauritius and, to a lesser extent, in other countries in the region. In addition to sourcing services, they provide quality control for the buyer to ensure that each shipment meets specifications. Because textile agencies are service companies, in many countries they are not eligible for investment incentives and tax benefits offered to manufacturing firms. But, as this study demonstrates, they are often a vital part of the marketing infrastructure for manufacturing companies who want to export. Mauritius, which has an effective group of textile agencies, has a special export processing regime under which they operate with benefits similar to those of the manufacturers in the Export Processing Zone. Botswana's investment incentive program includes 'linking service industries' (BMCI 2000:48).

Overvalued exchange rates are a problem in about half the countries in the region. Those firms exporting to Europe have had difficulties recently with the low value of the euro. On the other hand, countries in the Common Monetary Area have been helped by the declining value of the South African Rand. Overvalued exchange rates, in effect, tax exports and subsidise competing imports.

Cost, Quality and Delivery

Can the manufacturers in the region compete on cost, quality and delivery? The results are mixed. In general, garment manufacturers are good at meeting delivery schedules, but textile manufacturers are not. The region could be competitive on cotton-fibre costs, but regional barriers to trade and high transportation costs reduce this advantage. The region has large variations in the cost and reliability of electricity. Labour in the highest cost country in the region (South Africa) costs nine times as much as that in the lowest cost country (Malawi). The analysis of factor costs and availability, investment attractiveness, and the existence of unused capacity, shows that no single country has an absolute advantage in all factors affecting competitiveness for all steps in the garment supply chain. That chain consists of a series of steps from fibre production through yarn, fabric, and garment manufacturing and distribution. Each step requires different intensity of factor inputs, different levels of capital investment, and different lead times for installing production facilities. For example, textile production requires much larger capital investment but much lower labour input than garment production. As a result, a country with low labour costs, but high capital costs can be expected to develop a competitive garment industry, but would have difficulty developing a competitive textile industry.

From the discussion in the section on The Nature of Textile and Garment Production, we have seen that each production stage has its unique requirements. In the section on Strengths and Weaknesses by Country, we will see which counties have potential competitive advantages at each production stage, and conclude that the most competitive garment-delivery pipelines are those that use the unique advantages of several countries. This analysis leads us to the conclusion that a regional rather than national approach is imperative for developing competitive garment-delivery pipelines.

Raw-Material, Labour and Energy Costs

Raw-Material Costs. Raw material is the largest component of the manufacturing cost of textiles and clothing. The raw material for yarn is either fibre in the form of staple or man-made chemicals that are extruded to form filament yarns. The staple fibre can be either natural fibre, such as cotton, wool or silk, or man-made fibre such as rayon, polyester, and acrylics. Most fibres and yarns are commodities; and the prices paid vary little from supplier to supplier but are subject to variations over time due to shifts in demand and supply. Some specialty yarns and fibres have limited markets, often command premium prices, and are frequently made-to-order. For most natural fibres, prices are set daily in public commodity markets for current or future delivery.

Cotton is the fibre used most for textile production in the world and the region. Acrylics, polyester and PP/HDPE[49] are the most frequently used man-made fibres. All are produced in the region. Man-made fibre production in the region, however, does not satisfy the demand;[50] and some important man-made specialty fibres, such as rayon, are not even produced in the region. Cotton is grown in large quantities and exported by Zambia, Zimbabwe, Tanzania, South Africa, Lesotho, Swaziland, and Mozambique.

The main influences on cotton prices are the world market price set in Liverpool and the premium or discount from the price of the standard grade based on quality. The cotton price is also influenced by transportation costs, which vary depending on the locations of the source and use of cotton.

In the current study, the project team found two major market constraints that caused prices for cotton to be artificially high. In Zambia, reportedly, the price textile manufacturers pay for Zambian cotton is the Liverpool c.i.f. price without any adjustment for the transportation cost from Zambia to Liverpool. Thus, Zambian textile manufacturers pay for a transportation cost that is not incurred; and, as a result, cotton costs are artificially high (Rubin and Mudenda 2001:24).

In South Africa cotton users are required to buy **all** the local cotton supply before import permits are granted (Jafta and Jeetah 2001:36). As a result, the spinners do not always use the proper grade cotton. This may cause them to use good cotton where an inferior grade would do, resulting in higher costs. It may also cause problems in blending and dyeing, resulting in quality problems. The market is further restricted in that import orders must arrive in 12 equal monthly shipments (Jafta and Jeetah 2001: 37). This imposes storage and financing costs on the spinners.

The SADC region has abundant cotton supplies; and cotton fibre is traded among the SADC countries without duties or quotas. Much of the local cotton is good quality, medium staple fibre suitable for the garments produced in the region for export. Approximately 10% of the ginned cotton fibre is normally lost as waste when spun into yarn. Therefore, the closer the yarn is spun to the ginnery, the less will be spent to transport material that is ultimately wasted, an important consideration particularly where transportation costs are high.[51] Using regional cotton and spinning it as close as possible to its source could give the region a competitive advantage on fibre costs.

The only real barrier to increased use of regional cotton resources is the cost of transportation. Anecdotal evidence indicates that this is sometimes abnormally high, apparently due to poor road infrastructure. For example, a Zambian textile manufacturer reportedly pays

[49] polypropylene/high density polyethylene

[50] Except for nylon filament yarn.

[51] About 10% of yarn is also wasted in conversion to woven fabric; and about 10% of fabric is wasted in conversion to garments. Thus, it is important to minimize the transportation costs between spinners and weavers and between weavers and garment manufacturers.

$600 to transport a 20-foot container from the cotton growing area in Chipata to the factory in Ndola (Rubin and Mudenda 2001:24). A 20-foot container holds about 10 tonnes of fibre. That yields a transportation cost of about U.S. 6¢ per kilogram or about 6% of current market prices just for internal transportation within Zambia.[52] A more comprehensive assessment of inter-regional transportation costs is needed to determine to what extent transportation costs are a barrier to intra-regional trade in fibre.

Man-made fibre production requires large capital investment; and, thus, only a few suppliers exist worldwide. South Africa and the Far East are the major suppliers to the SADC region. Suppliers in the Far East benefit from much larger economies of scale than those in South Africa, except in nylon filament yarn, and, as a result, charge generally lower prices. Despite the additional transportation costs, man-made fibre products from the Far East can be cheaper. For example, the c.i.f. price for dyed acrylic yarn used in Botswana was reportedly $4.86/kg for South African yarn and $4.16/kg for Chinese yarn (Rubin 2001a:16).

With no barriers to trade in man-made fibres, the SADC manufacturers would be able to purchase the fibre, filament yarn, and fabric from the lowest c.i.f.-cost supplier. This happens for products made for export. But, for garments made for the SACU market, SACU imposes two important restrictions on the use of such fibre: *(i)* the rules of origin for products produced from man-made fibre; and *(ii)* the SACU tariffs on such products.

Since the region is not self-sufficient in man-made fibre, these rules are an even greater problem. The only producer of man-made fibre and filament yarn in the region is South Africa.[53] South African manufacturers produce polyester staple and filament, acrylic staple, nylon filament yarn, and polypropylene filament yarns. The range is limited. For example, the region apparently produces no rayon, an important component of many high-value added fashion products. The supplies are insufficient for even domestic South African consumption (Jafta and Jeetah 2001:39). As discussed in the section on The Pipeline, about 10% of the man-made staple fibre requirement is imported from outside SADC. The region imports nearly half the fabric it uses for garment production, much of which is from man-made fibres.

The SACU duties and the rules of origin under the SADC Trade Protocol are, thus, among the biggest barriers to the development of competitive, regional garment supply chains.

Labour Costs. After raw materials, labour is the next largest component of a textile or clothing product's cost. The actual time spent, the labour cost per hour, the number of defects requiring rework, and the number of products that are rejected after final assembly or processing effectively determine the labour cost per garment. The SADC countries appear to be reasonably competitive in the number of defects and rejects (see section below on Quality). The labour cost per hour and labour productivity need closer examination.

The project team asked manufacturers what they paid newly hired direct factory labourers and what they paid those with five years experience. The base salaries were adjusted for the average productivity bonus. In comparing the labour costs among the SADC countries, the reference used is the average of the new-hire and the 5-year cost. The cost per month in the highest cost country, South Africa, is 9.5 times that of the lowest cost country, Malawi (Table 10).

International norms for processing time, such as the GSD (General Sewing Data) system, determine the standard time, or *standard minute value*, for each garment. The use of standard minute values is rare in the region; and no recent, comprehensive data on productivity in the region's garment industry exists. Using the data that is available, however, gives some idea of how competitive the garment industry is on labour cost.

---

[52] Throughout this report the symbol ¢ refers to U.S. cents unless specifically stated to the contrary.

[53] Olefinic tape and raffia are produced in other SADC countries, but this material is rarely used to make fabrics for clothing.

Biggs, Miller, Otto and Tyler reported productivity figures for representative garments in several African and Asian countries (Biggs *et al*. 1996: 78). Biggs, Nasir and Fishman (1996:26) reported productivity data for the Mozambican garment industry that was corroborated by Coughlin (2000). Khanna (1993:282)[54] reported productivity data for some Asian countries.

For the comparison of labour cost among the SADC countries, the reference garment is a men's casual shirt. Productivity is stated as the number of pieces per operator per day. The data for unit cost for assembly shows how sensitive competitiveness is to both labour costs and productivity (Table 10). Lesotho has moderate wage costs and fairly high productivity and, as a result, is among the lowest cost countries. Kenya and Mozambique have low productivity but also low wage costs and, therefore, are **competitive even with India.** Malawi has extremely low wage costs and is clearly the most cost-competitive country in the region on labour costs. Mauritius has only the ninth lowest labour cost, but the fourth highest productivity, and thus is ranked seventh on unit-assembly cost.

For the export markets, labour cost per unit is one of the critical factors for cost competitiveness in garment manufacturing. Manufacturers in all SADC countries may import fabric duty-free if the garments they make are exported. Assuming the fabric is bought competitively on world markets, differences in labour costs will largely determine the garment's cost competitiveness. Productivity and labour-cost comparisons demonstrate that manufacturers in many SADC countries can be competitive with those in the Far East and South Asia (Table 9). But some apparently are not. Botswana would have to achieve productivity levels of about 19 pieces per day per operator for the reference garment to be competitive with China. Difficult perhaps, but possible. South Africa would have to produce at the nearly impossible rate of 34 garments per operator day!

[54] as cited in Kathuria and Bhardwaj (1998:16)

Table 9. *Productivity and labour cost comparison for men's casual shirt*

	Pieces per operator day	**Productivity rank** (1=highest)	**Monthly salary** ($)	**Monthly salary rank** (1=lowest)	**Unit cost for assembly** ($)
Malawi	*10.5*	*8*	26.0	1	*0.11*
Mozambique	10.5	8	44.0	2	0.19
India	16.0	5	72.5	5	0.21
Kenya	13.5	7	62.5	3	0.21
Lesotho	18.0	4	87.0	7	0.22
Zambia	*10.5*	*8*	60.4	4	*0.26*
Mauritius	*18.0*	*4*	108.0	9	*0.27*
Zimbabwe	13.0	7	80.0	6	0.28
Tanzania	*10.5*	*8*	72.0	5	*0.31*
Swaziland	15.0	6	105.4	8	0.32
China-EPZ	20.0	1	150.0	11	0.34
Botswana	15.0	6	139.0	10	0.42
Namibia	*10.5*	*8*	167.5	12	*0.73*
South Africa	15.0	6	248.0	13	0.75
Thailand*	19.8	2	n.a.	n.a.	n.a.
Taiwan*	18.2	3	n.a.	n.a.	n.a.

Sources: see text. Month salary data for the SADC countries is from the Country Reports.
Note: Countries are listed in order by unit assembly cost, from lowest to highest. Productivity data (pieces per operator day) for Malawi, Zambia, Mauritius, Namibia and Tanzania are estimates. For Mauritius, the data is based on comparative productivity indices (Gherzi 2000: 9). For the others, the productivity is assumed to equal the lowest reported in the region, i.e., 10.5 pieces per day. This estimated data and numbers based on the estimated productivity are in italics. Unit costs are calculated assuming a month of 21.8 days.
*Monthly salary figures for Thailand and Taiwan are unavailable. Productivity data are shown for comparison only.

Keep in mind, however, that SADC garment manufacturers have no quota for the European Union and the United States. This combined with the duty-free privileges available under Lomé/Cotonou and AGOA gives SADC suppliers a potential cost advantage of 30% over South Asia and 45% over China (Biggs *et al.* 1996:67). Assuming labour is 30% of the ex-factory price of a garment, and the fabric cost is the same, the per unit *labour assembly cost* in SADC can be double the cost in India and 2.5 times the cost in China for the SADC manufacturer to be competitive. Given this, the competitive per unit assembly cost for China would be $0.85 and for India $0.42. All SADC countries are, therefore, potentially competitive with China; and all but South Africa are potentially competitive with India on labour cost.

This advantage will not last forever. The Agreement on Textiles and Clothing (ATC), under which countries and regional trading groups impose quotas on textile and clothing imports will expire in January 2005. After that, the only advantage SADC countries will have over India and China will be the duties, which average about 20%. In this case, labour costs in SADC will only be competitive if they are 1.67 times the labour cost in countries, such as China and India, that do not have duty-free privileges. This implies that South Africa[55] will

[55] The labour costs in South Africa are for those firms operating in urbanized areas, where there are active labour unions. Foreign investors and emerging entrepreneurs are setting up operations in rural decentralized zones where unions are not active, and employers are able to negotiate wages as much as 50% below the minimum wage of 192 Rand ($24) per week (Cotton Board 2001:2).

no longer be competitive with China and India; and Botswana will lose its competitive advantage over India.

Monthly labour costs are made up not only of the salary and bonuses paid to workers but also the social charges the employer incurs for pensions and national health services. Some countries also require employers to pay an end-of-service gratuity. In Zambia, textile and clothing manufacturers pay an end of service gratuity equal to three months per year of employment, calculated at the wage rate being paid when the employee leaves. This creates a large liability for employers, who must include this future expense when calculating the effective current wage costs. In Botswana, the end of service gratuity is one month's wages for each year of service. Employers are obliged, however, to pay this every five years if the employee requests as most do. This obligation raises the present value of this cost. In Swaziland, an employee is entitled to one month's pay plus 14 days pay for each year of service.

Other social benefits affect labour costs, e.g., sick-leave allowances, maternity benefits, and vacation entitlements. Each country report discusses the specific national policies and their potential effects on the textile and clothing industries and recommends national actions where appropriate. The current study did not, however, collect comprehensive data on these social charges for all countries in the region. A systematic study would be beneficial. This would enable investors and employers to fully understand the labour costs in each SADC country. It would also help policy makers who may want to review national policies in light of their effect on labour-cost competitiveness.

From the point of view of capacity utilization, the most important labour regulations are those on overtime and on female working hours. Overtime is very important for seasonal industries such as garment manufacturing. As noted in the section on Capacity Utilization, the project team assumed the maximum hours for a garment manufacturer was 60 hours per week. The standard workweek in the region varies by country and is between 45 and 48 hours. To reach full capacity utilization, garment manufacturers would have to work between 12 and 15 overtime hours per week. Mozambique, where the workweek is 48 hours, limits overtime to no more than two hours per day and 100 hours per year. As a result, garment manufacturers in Mozambique can only reach full capacity utilization about nine weeks a year. Significant restrictions on overtime that affect the textile and clothing industry are discussed in each country report.

Table 10. *Comparison of factor costs*

	Labour cost (new hire)	**Labour cost** (5 years experience)	**Electric cost** (¢/kWh) **if factory works:**		**Water cost**	**Cost to ship***
	($/month)	($/month)	48 hrs/week	168 hours/week	(¢/m²)	($ for a 20' container)
Malawi	19.50	32.00	n.a.	5.0	n.a	n.a.
Mozambique	36.00	44.00	4.5	3.2	n.a.	trivial
Zambia	49.86	70.98	5.5	3.5	n.a.	3,200
Tanzania	61.50	82.14	n.a.	20.6	n.a.	trivial
Zimbabwe	70.00	89.67	n.a.	5.1	n.a.	2,400
Lesotho	69.00	105.00	n.a.	6.7	42.0	n.a.
Mauritius	66.15	149.75	6.3	5.2	50.0	trivial
Botswana	100.00	178.00	5.3	3.2	61.4	1,149
Swaziland	93.46	117.26	5.6	3.1	49.0	486
Namibia	101.56	234.00	n.a.	4.4	63.2	trivial
South Africa	213.00	283.00	3.2	3.1	n.a	trivial

Source: the project's country studies

Note: n.a. = data not available. Electricity charges include VAT and other taxes. The symbol ¢ is for U.S. cents.

Cost to ship* is the **round-trip cost to and from the nearest port and includes container-handling charges. The cost of shipping to the port for coastal countries is considered trivial

Females are the majority of the labour force in most garment factories. In many countries, manufacturers reported they could not use a second shift because of the difficulty in having women work in the evenings.[56] Textile manufacturers generally work 24 hours a day and, although they are not a majority as in garment manufacturing, females constitute an important part of the workforce. There are, of course, social problems related to women working in the evenings. Furthermore, in five countries lack of security and transportation were also cited as constraints in having second shifts (see chart, p. 29). Restrictions also exist. For example in Swaziland, women are not allowed to work between the hours of 10 p.m. and 6 a.m. unless the employer obtains permission from the labour commissioner.[57] There are probably no general solutions or rules that could apply to all countries. It is incumbent on each country's policy makers to be aware of the importance of females in textile and clothing manufacturing and to reduce restrictions on their working hours due to legislation, regulations, social conditions, or inadequate infrastructure.

Garment manufacturing is labour intensive. Improving labour productivity improves, therefore, the industry's competitiveness. Paying operators by the piece is a recognized method of increasing labour productivity in garment manufacturing. It is common in high productivity garment manufacturing countries such as the United States and the Far East. In Mauritius, one of the higher productivity countries in the region, most of the factories surveyed reported paying their workers on a piece-rate basis. Piece-rate payments reduce the need for supervision and give the workers immediate and meaningful feedback on whether or not they are meeting production targets.

Outside of Mauritius, the project team found that piece-rate payments were rare in the region's garment industry. In some countries, such as Zimbabwe, piece-rates are legal but have not figured in the collective bargaining agreements in the garment industry. In Swaziland, piece-rates are legal 'but not encouraged' and none of the manufacturers

[56] The other main reason cited was the lack of managers to supervise a second shift.

[57] Since none of the manufacturers interviewed had ever applied, there is no information about how difficult it is to obtain this permission.

interviewed reported paying their employees that way. In Lesotho, straight piece-rate pay is not permitted. In Botswana, firms operating under the Financial Assistance Policy (FAP), were not allowed to pay piece-rates. In South Africa, only one manufacturer reported using piece-rates at all. The rest cited labour regulations and union prohibitions against piece-rates as reasons for not paying piece-rates.

Two misunderstandings concerning the use of piece-rates result in it having a bad reputation. The first is that the use of piece-rate-pay systems *forces* the workers to work harder. In fact, it encourages workers to work not really harder, but smarter, as the workers will earn more if they produce more. The second misunderstanding is that piece-rates are a way to pay workers less than the minimum wage. In fact, in most countries where piece-rates are widely used, workers on piece-rate *must* be paid the minimum wage. To be fully effective, however, labour laws must allow workers to be easily dismissed if they do not produce enough to earn the minimum wage after a specified period such as three months.[58]

Industrial engineering is what garment manufacturers use in high productivity countries such as the United States and Europe. Industrial engineering enables garment manufacturers to establish the best possible timing for each operation. Piece-rate pay gives individual operators the incentive to meet the target times, as well as to receive immediate feedback on whether or not they are meeting the targets. The combination of industrial engineering with piece-rate pay for operators is essential for obtaining the best possible labour productivity in garment operations.[59]

Energy Costs. Another important factor is energy cost. The main sources of energy for the garment and textile industry are *(i)* electricity mainly for lighting and running machinery and *(ii)* fuel oil used to produce steam. Coal is also an important energy source that is used to make steam, and, where available, is generally a cheaper alternative than fuel. Fuel, mainly diesel, is also used for transportation.

As with any other cost factor, the effective energy cost is a combination of its price, the reliability of its provision, and the efficiency with which it is used. The current study did not attempt to evaluate the energy efficiency of textile and garment makers in the region. If firms that are competitive in energy usage are still uncompetitive in energy costs due to the price of energy, policy makers can consider changing energy pricing policies.[60] It will be up to the private sector firms, through their industry associations, to demonstrate how competitive they are on energy usage and whether relief on energy costs would enhance their competitiveness.

Electricity costs vary widely over the region (Table 10). Those in the country with the highest reported energy cost, Tanzania, are 6.6 times those in the lowest cost country, South Africa.[61] Electricity consumption in the textile industry is much higher than in the garment industry. As a result, high electric costs are not as great a barrier to competitiveness in garment manufacturing as in textiles. Similarly, fuel consumption for heat is greatest in the dyeing and fabric finishing industries (Table 11). Countries that have high fuel costs or difficulties obtaining fuel will be at a disadvantage in those processing steps. Countries that

[58] Swaziland allows piece-rates so long as the workers are paid the minimum wage, but there is no simplified dismissal procedure for unproductive employees.

[59] An alternative to straight piece-rate pay that is applicable to certain types of garment manufacturing is a team-based incentive in conjunction with modular manufacturing. Modular manufacturing is a short-cycle manufacturing technique used in many Quick Response supply chains. An entire team produces a garment; and each operator is cross-trained on all assembly operations. Industrial engineering is still used to identify the most efficient work methods for each operation and to set ideal the time for each operation, which is often used as the basis for setting the team-based incentive for each garment style.

[60] Mauritius, for example, charges manufacturers in the Export Processing Zone, less than the normal rate for electricity.

[61] on the basis of a factory working 168 hours per week

have coal and cost effective means of transporting it to the factories, on the other hand, have a potential advantage.

The continental SADC region is fortunate in having one of the most efficient and effective power grids in the world, that of South Africa. Integration of all SADC countries with this power grid is important, as competitive electric costs are critical for developing the region's textile industry. One cotton-exporting country, Tanzania, has many idle and underused textile mills and very high electricity costs. Other countries have excess textile capacity and could also reduce their electricity costs. The region will need this textile production capacity to meet the requirements for AGOA-eligible yarn and fabric. Integration with the South African grid is preferable, in the long term, to providing subsidized rates. The latter may be considered as a short-term strategy to kick-start investment in these sectors.

The reliability of the energy supply is as important as its cost. Fluctuations in voltage and electrical supply interruptions can wreak havoc on textile production, particularly dyeing, and cause work stoppages in garment production. In seven out of 11 countries, manufacturers reported that 'irregular supply of electricity' was a very important or extremely important constraint on capacity utilization (see chart, p. 29). Improving the reliability of the electricity supply needs to be one of the priority projects for the region's infrastructure.

Fuel oil shortages can cause temporary shut-downs of operations, particularly in the textile industry, but can also affect garment operations dependant on fuel oil to create steam for pressing and for garment washing (Table 11). Usually, such shortages also signal shortages of fuel available for transportation, which creates difficulties in getting supplies, sending shipments, and having staff come to work. Fuel oil shortages were considered an important constraint in three of the 11 countries. Two of those countries—Zambia and Zimbabwe—have idle and underused textile mills. Fuel shortages in those countries, will therefore, be an important barrier to increasing the region's textile capacity. The shortages in Zimbabwe seem to be the result of economic problems, while in Zambia they seem to be due to weak transport infrastructure. Improving the underlying problems causing the fuel shortages need to be priorities for these countries.

Table 11. *Relative use of energy and water*

Manufacturing process	Electricity consumption	Fuel (coal or oil) consumption	Water consumption
Spinning	medium	very low	very low
Yarn dyeing	medium	high	high
Weaving	medium	medium	medium
Circular knit and automated flat knit	medium	low	very low
Hand flat knitting	very low	low	low
Fabric dyeing and finishing	high	high	high
Garment making	low	low	low
Garment dyeing	medium	high	high

Note: This is relative data only. Consumption varies by product type and process method.

Quality

Quality has three aspects. The *competitive* aspect means that the customer buys and keeps the product. In this study, we use the percent of returns from customers to measure how well firms in the region meet customer requirements. The *internal* aspects are *process quality* and the *quality process*. Process quality refers to how well the production process conforms to standards. In this study, we use the percent of repairs and rejects as an indicator of the process quality firms have achieved. The quality process refers to the business processes a firm

has installed to control and ensure quality. In this study, we refer to the types of quality processes the firms have installed to measure the state of the quality processes in the region.

Textile and clothing firms in most countries reported doing well on the competitive aspect of quality. The international norm is 1.5% return of sales. Of the seven countries in which *textile* manufacturers were questioned, this was achieved everywhere but in Swaziland. Of the 10 countries where *garment* manufacturers were questioned, those in Mauritius, Lesotho, Botswana, Namibia and Mozambique achieved results within international norms (Table 12).[62]

According to international norms, rejects should be below 5%. Only the textile manufacturers in Swaziland and Tanzania achieved such results. Garment manufacturers did better, however, with those in all countries, except Namibia and Botswana, meeting international standards.

Repairs after sewing in garment manufacturing need to be below 10%. The average reported performance in all countries was, therefore, within international norms. Repairs after sewing are an important issue for cost competitiveness because, in those countries where piece-rate pay is *not* used, the repair cost is paid by the manufacturer.[63] Such repairs are always, however, an issue for delivery competitiveness since excess repairs cause manufacturing delays.

The firms surveyed have not installed sophisticated quality processes. Few firms in the region are ISO 9000 certified or are in the process of getting certified; and very few have organized quality circles or other sophisticated total-quality-management systems. Most do gather data on quality. In the textile industry, such data is often used in a statistical quality-control system for process control. Garment manufacturers, however, generally use the quality results for record keeping and performance evaluation. Process quality is controlled by inspecting individual garments as is done in most garment producing countries.

Box 1

ISO 9000 and the Quality Process

ISO 9000 is a set of international standards for a firm's quality management system. When the quality management system meets these standards it can be certified as being ISO 9000 compliant by a body accredited to the International Standards Organization (ISO). After certification, the certifying body will periodically review the firm's quality management systems, and a firm can be de-certified if found not to be in compliance. The certifying bodies are either national standards bureaus or independent certifying agencies such as Bureau Veritas.

To obtain ISO 9000 certification, a firm has to demonstrate that management is committed to making the quality management approach a key part of its strategic approach to business. The firm has to then develop and implement a quality management system whose key features are:

- Clear responsibilities for carrying out each part of the system
- A published quality policy and procedures manual that defines in detail each document in the quality management system, responsibilities for their creation and maintenance, and how they are to be distributed
- Written procedures for dealing with non-conforming result
- An internal audit process that ensures the system is followed

Improving the quality process improves quality competitiveness. ISO 9000 is an internationally recognized quality-process standard that is being widely adopted in many

[62] 'Returns from customers' include goods that were rejected, not paid for or subject to non-conformity penalties, even if the goods were not physically returned to the manufacturer

[63] Piece-rate pay systems allow a defect to be traced to an operator, who repairs the defect without receiving any payment for the item until the defect is repaired. Thus, the repair is done on *her own time.*

industries, including the textile and garment industry (Box 1).[64] Being ISO 9000 certified does not mean that a firm will produce better products or provide better services than a firm that is not certified. It does ensure systematic management of quality and, if this is done thoroughly, *consistent* results. The firm will also use the results of quality management to continuously improve its products and services and thus become more competitive.

The process of becoming ISO 9000 certified forces a firm to improve, document, and make its internal processes consistent. Becoming ISO 9000 certified is widely recognized as one of the best ways for a firm to improve its internal management processes and reduce losses due to inconsistent procedures. ISO 9000 also addresses the problems of poor co-ordination among sales, merchandising, and planning that lead to unreliable delivery performance. Consequently, as part of national technology policy, each country needs to ensure that a body exists to certify manufacturers as ISO 9000 compliant and that these firms have access to the necessary expertise. Countries without a national standards bureau accredited to certify manufacturers as ISO 9000 compliant can consider contracting another country's bureau to provide this service as the Namibian Bureau of Standards has done with the South African Bureau of Standards. The status of ISO 9000 certifying bodies is discussed in each country report in the section on Quality.

European buyers are increasingly demanding ISO 9000 certification, although it is less important for American buyers. ISO 9000 certification testifies to a firm's good management, business sophistication, and reliability and is important when approaching new customers, particularly newcomers to the region. In addition, many large wholesalers and brand-name merchants certify their suppliers as meeting latter's quality standards. This is essential for developing strategic alliances with buyers.[65] SADC garment manufacturers in many countries have been successful in obtaining these proprietary certifications. These certifications will become more important to the region as more firms export to demanding merchants in the U.S. and Europe. Garment manufacturers will also need to ensure their regional textile suppliers are certified by their customers. In all cases, implementing quality management processes compliant with ISO 9000 gives manufacturers a solid foundation that will help them become *buyer certified*.

Garment inspection before shipment is an essential service for quality control and is demanded by most export customers. Large buyers usually have their own quality-control staff that perform inspections at the suppliers' factories. Smaller buyers often use local independent textile agents. Textile agents also help buyers find suitable factories to process their orders. In some cases, the textile agent sub-contracts the order out to several factories based on their available capacity and technical capabilities and sometimes negotiates a discount from textile mills for those factories. Textile agents are well established in Mauritius and South Africa and are a vital part of the infrastructure for the garment industries there. Textile agents are not manufacturing firms; and, thus, in several countries in the region are not eligible for the same investment incentives and operating benefits as manufacturers. Mauritius has set up an Export Service Zone in parallel with the Export Processing Zone to grant the textile agents, designers, and other support companies the tax and other benefits available to the manufacturers. Other countries in the region need to consider copying this practice.

[64] In Mauritius eight of the 11 manufacturers interviewed were either certified or in the process of doing so. Strong government and promotion plus recognition of the benefits have led so many firms to seek ISO9000 certification.

[65] *Strategic alliances* is the name given to an important co-operative business strategy in the textile and apparel industry (see "Strategic Alliances", p. 81).

Table 12. *Quality results reported by textile and garment manufacturers (%)*

	Textile manufacturers		Garment manufacturers		
	Rejects	**Returns**	**Repairs**	**Rejects**	**Returns**
Botswana	n.a	n.a	10.0	6.0	0.0
Lesotho	n.a.	n.a	8.0	1.0	0.0
Malawi	7.5	0.0	5.8	3.3	3.4
Mauritius	5.5	1.1	8.2	2.7	0.1
Mozambique	n.a	n.a	4.9	3.5	0.0
Namibia	n.a.	n.a	4.3	5.6	0.2
South Africa	5.5	1.3	8.8	2.1	2.3
Swaziland	3.5	5	7.3	2.0	3.3
Tanzania	4.4	0.4	n.a	n.a	n.a
Zambia	5.0	0.0	5.0	< 0.5	4.0
Zimbabwe	8.5	1.5	2.4	4.6	3.3

Source: Field results from the country reports
Notes: n.a. = data not available

Delivery

Delivery time and cost are important for the garment industry. Delivery time has two aspects: *(i)* the actual time required to deliver an order and *(ii)* the reliability of delivery. This study does not review the actual delivery times to export markets but it does measure delivery reliability by using the manufacturers' on-time performance.

Despite the previous caveat, the field survey did turn up several issues that affect delivery times. The most frequently used port for imports and exports for the continental SADC countries is Durban. The port is congested; and labour problems at the port cause unpredictable delays. Port Elisabeth is an alternative but does not have the same frequency of sailings. Walvis Bay is an important alternative now that the all-weather trans-Kalahari and trans-Caprivi highways have been completed. Shipping times from Walvis Bay to Europe and the U.S. are 10 days faster than those from Durban. Sailings are less frequent from Walvis Bay than from Durban; but, if traffic were to increase, presumably so would sailing frequency. The use of Walvis Bay as an alternative to Durban needs to be promoted.

Another issue that affects delivery time is the lack of feeder services among the ports in the region.[66] As a result, shipping times and costs among these ports are higher than necessary. The SADC Transport Commission (SATTC) needs to study and recommend how to implement viable regional feeder services.

Delivery cost is a significant aspect of an order's cost. The region's ability to compete depends in part on being able to deliver orders to the customer at a reasonable cost. As much raw material is imported from outside the region, it is crucial to have competitive and reliable ways to do so.

Of the 11 countries that have signed the SADC Trade Protocol, six are entirely land-locked. Lesotho and Swaziland, although land-locked are close to South African ports and have reasonably priced, regular overland shipments to and from those ports. Zambia, Malawi and Zimbabwe have to depend on transport infrastructures of varying quality and cost. High inland transportation costs was considered a very or extremely important constraint in nine countries (see chart, p. 29). Improving this infrastructure and thereby reducing the intra-

[66] Though the cost is very high, shipments from the cotton producing areas in northern Mozambique to Maputo are faster and far more reliable by road than by sea.

regional transportation cost and increasing its reliability needs to be a high priority project for the region's infrastructure.

In this study, delivery reliability is measured by the percentage of on-time deliveries reported by manufacturers for their international and domestic orders. International buyers expect 95% of deliveries to be on time. Only the garment manufacturers in Botswana, Mauritius, Namibia, and Lesotho achieved this; and none of the textile manufacturers did (Table 13). The textile industry's performance was poor for international orders and worse for domestic deliveries. This is disturbing. As discussed in the subsection on **Response** in **The Way Forward,** garment manufacturers cannot deliver on time if their fabric arrives late. In the interviews, those garment manufacturers that are having the most difficulty in meeting delivery schedules said the main problem was late fabric deliveries. This appears to be the case in Zambia, Zimbabwe, South Africa, Mozambique and, most seriously so, Malawi.[67]

Improving the on-time delivery of garment manufacturers in the region will, as a result, depend on improving the on-time delivery performance of the fabric manufacturers. Since AGOA requires the yarn and fabric used to make garments eligible for duty-free export to the U.S. be produced in AGOA-eligible countries or the U.S. itself, the ability of textile manufacturers in the region to offer timely delivery is critical for the region's ability to take advantage of the trade opportunities offered by AGOA.

Table 13. *Percentage of deliveries on time during 2000*

	Garment manufacturers		Textile manufacturers	
	International	**Domestic**	**International**	**Domestic**
Botswana	95	92	—	—
Lesotho	95	—	—	—
Malawi	50	63	50	25
Mauritius	98	—	85	86
Mozambique	67	—	—	—
Namibia	100	100	—	—
South Africa	76	92	89	90
Swaziland	92	—	—	—
Tanzania	n.a.	n.a	n.a	n.a.
Zambia	93	73	90	93
Zimbabwe	80	—	82	—

Source: survey data

Note: n.a. = data not available. A dashed line means data for that industry sector or domestic deliveries was not collected. Data for Zimbabwe is for both domestic and international deliveries combined

Strengths and Weaknesses by Country

Having discussed the characteristics of the various production stages and the current situation in each of the SADC countries, it is now possible to analyse their comparative advantages in each stage of textile and clothing production. This analysis makes clear two things: *(i)* no country has an absolute advantage in all stages of production; and *(ii)* the most competitive pipeline for garment production will be a regional one with each country contributing what it does best.

[67] In Mauritius, fabric producers are only 86% on-time for delivery to garment producers. Despite this, the garment manufacturers still achieve world-class delivery levels because *(i)* only about 40% of the fabric used by garment exporters is made in Mauritius and *(ii)* Mauritian manufacturers sometimes use air-freight if production is late.

Each country in the SADC region has a set of characteristics that will determine, in part, in which industries it will most likely be competitive. Analysing these characteristics will enable us to develop a table for the region, showing how each country can contribute to developing a competitive pipeline. This will help policy makers develop local strategies consistent with an integrated, regional approach rather than a limited national approach. The competitive table can also guide investors to the industries with the best prospects in each country.

Each country is rated according to competitive factors that correspond to the characteristics of the different production stages (Table 3).

Competitive Factor		**Production Stage Characteristic**
Electricity: cost and reliability	→	Energy Intensity
Water: cost and availability	→	Water Intensity
Labour cost	→	Labour Intensity
Investment attractiveness	→	Capital Intensity
Percent of unused capacity	→	Lead-time for installing new production

a.) Using data from Table 10, the scale for **electric supply cost** is:

up to 4¢/kWh	=	low
4.1¢/kWh to 10¢/kWh	=	moderate
above 10¢/kWh	=	high

The scale for **electric supply reliability** is the importance manufacturers gave to unreliable electric supply as a constraint on capacity utilization.[68] In this analysis, we used the inverse of the scale used in the survey, i.e., 3 = unimportant, 2 = important, 1 = very important, and 0 = extremely important. In this way, the higher number indicates a more reliable electric supply.

b.) The scale for evaluating **water costs** (using data from Table 10) is:

less than or equal to 50¢/m³	=	moderate
more than 50¢/m³	=	high

Water supply availability is based on anecdotal evidence gathered in the field survey.

c.) The scale for evaluating **labour costs** (using data from Table 10) is based on the average of the new-hire and 5-year labour costs:

up to $50 per month	= low
above $50 and up to $100 per month	= moderate
above $100 and up to $150 per month	= high
above $150 per month	= very high

d.) To evaluate **investment attractiveness**, we rated each country on a series of weighted factors using data gathered in the country reports (Table 14). The results in Table 15 for *investment attractiveness* are the percentages each country received of the maximum score possible. The higher the percentage, the more attractive the country is for a potential investor.

[68] based on data in the country reports

Table 14. *Factor weights for computing investment attractiveness*

Factor	Weight	Data used
Schemes for duty exemptions on inputs	27%	Data gathered in field studies
Ease of obtaining work permits	27%	Manufacturers' response to survey questions
Currency overvaluation percent	13%	Percentage excess of the parallel exchange rate to the US dollar over the bank rate
Time taken to open a new company	8%	Data gathered in field studies
Corporate tax levels	8%	Data gathered in field studies
Companies constrained by lack of long-term capital	8%	Manufacturers' response to survey questions
Real interest rates	5%	Data gathered in field studies
Companies constrained by lack of short term capital	4%	Manufacturers' response to survey questions

Note: Detailed calculations of each factor and results for each country are in **Annex 3**

Table 15. *Comparison of competitive factors among SADC countries*

	Electric supply		Water supply		Labour costs	Investment attractive-ness	Unused production capacity
	Cost	Reliability	Cost	Availabiliy			
Botswana	moderate	1.5	high	low	high	**90.7%**	Garments-40%
Lesotho	moderate	1.7	moderate	medium	moderate	**76.2%**	Garments-32%
Malawi	moderate	1.4	n.a.	n.a.	low	**63.5%**	Textiles-41% Garments-37%
Mozambique	high	1.7	n.a.	n.a.	low	**84.0%**	Textiles-68% Garments-33%
Mauritius	moderate	2.9	moderate	medium	high	**52.5%**	Textiles-7% Garments-17%
Namibia	moderate	3.0	high	variable	very high	**91.9%**	Garments-59%
South Africa	low	2.7	n.a.	good	very high	**58.2%**	Textiles-23% Garments-36%
Swaziland	moderate	2.1	moderate	good	high	**78.7%**	Textiles-58% Garments-27%
Tanzania	high	0.0	n.a.	n.a.	moderate	**34.2%**	Textile-32% Garments-16%
Zambia	low	0.6	n.a.	good	moderate	**72.8%**	Textiles- 14% Garments-77%
Zimbabwe	moderate	1.5	n.a.	good	moderate	**40.6%**	Textiles- 13% Garments-44%

Source: see text. Unused production capacity is from Table 6.
Note: For explanation of scales, see preceding text.

The results of this competitive analysis give us a composite picture of the region (Table 16). For each country, we show the strengths and weaknesses and point to stages of production most likely to have a competitive advantage. The conclusion is based on an objective analysis of the competitive factors (Table 15) and on subjective factors noted in the strengths and weaknesses. Finally, to summarize the results, Table 17 presents the countries that have potential advantages for each production stage.

Table 16. *Strengths and weaknesses by country*

Country	Strengths	Weaknesses	Conclusions: Comparative advantage for the following sub-sectors:
Botswana	Capital available Good investment climate Close to cotton and yarn in Zimbabwe and Zambia Moderately priced electricity Significant unused capacity in garment production Close to major South African markets Close to Walvis Bay	Lack of water High labour costs	Knitting and spinning Low water-usage weaving Opportunity to produce high-end fashion apparel, and apparel under high productivity conditions
Lesotho	Good investment climate Moderate electric cost Moderate labour costs Moderate water costs Unused production capacity available in garments	Lack of factory shells	Yarn and fabric production Apparel production, basics
Malawi	Moderate electric costs Lowest labour costs in the region Good investment climate Unused capacity in textiles and garments Cotton Exporter	Moderately reliable electric supply	Yarn and fabric production Apparel production, basics (Must improve electric supply reliability)
Mozambique	Low labour costs Good investment climate Unused capacity in textiles and garments Cotton Exporter	High electric costs	Apparel production, basics Spinning
Mauritius	Fair investment climate Moderate cost and very reliable electric supply Moderate water costs Well-developed design and marketing capabilities	High labour costs	Yarn and fabric production High-end fashion apparel High productivity apparel production Product design and marketing
Namibia	Low cost and reliable electric supplies Good investment climate Water available in certain regions Walvis Bay	Very high labour costs Lack of existing industrial garment and textile industry	Yarn production Low water use weaving High-end fashion apparel Apparel produced under high productivity conditions Logistics centre for transport to the U.S. and Europe
South Africa	Moderate investment climate Low cost and reliable electric supply Good water supply Well-developed design and marketing capabilities Sole producer in the region of man-made fibres for apparel	Highest labour costs in the region	Product design and marketing Yarn and fabric production High-end fashion apparel
Swaziland	Low cost and reliable electric supply Good water availability Good investment climate Significant unused capacity in spinning and garments	High cost labour High water costs	Yarn production High-end fashion apparel Apparel produced under high productivity conditions
Tanzania	Moderate labour costs Unused capacity in textiles Cotton Exporter	Highest electricity costs in the region Unreliable electricity supply Poor investment climate	Apparel production Spinning (Must improve electric supply reliability and investment climate)
Zambia	Lowest electricity costs in the region Good water availability Good investment climate Moderate labour costs Cotton Exporter	Unreliable electricity supply High shipping costs to sea-ports	Yarn and fabric production Apparel production (Must improve electric supply reliability)
Zimbabwe	Moderate electricity costs Good water availability Moderate labour costs Cotton Exporter	Poor investment climate Unreliable electricity and fuel supply High shipping costs to sea-ports	Apparel Yarn and fabric (Must improve electric and fuel supply reliability and investment climate)

Table 17. *Countries with potential comparative advantages in different production stages*

Production Stage	Countries	Comments
Spinning	Botswana, Lesotho, Mozambique, Mauritius, Namibia, South Africa, Swaziland	
	Malawi, Zambia	Must improve electric supply reliability
	Zimbabwe, Tanzania	Must improve electric supply and investment climate
Knitting	Botswana, Lesotho	Hand and automated
	Malawi	Hand; automated knitting if it can improve its electric supply
	Mauritius, Namibia, South Africa,Swaziland	Automated
	Zambia, Zimbabwe	Hand and automated (see comments under spinning)
Weaving	Botswana, Namibia	Low water usage weaving
	Lesotho, Mauritius, South Africa	
	Zambia, Malawi, Zimbabwe	(see comments under spinning)
Fabric dyeing and finishing and yarn dyeing	Lesotho, Mauritius, South Africa	
	Zimbabwe, Zambia, Malawi	(see comments under spinning)
Garment production-basics	Lesotho, Mozambique	
	Malawi, Zambia, Zimbabwe	(see comments under spinning)
	Tanzania	Must improve the reliability of the supply of electricity
Garment production-fashion and high productivity	Botswana, Mauritius, Swaziland	
	Namibia	Also a logistics centre
	South Africa	High-end fashion garments; needs to relax restrictions on piece rates to be competitive in high productivity garments
Product design, development and merchandising and marketing	Mauritius	
	South Africa	

Working together, the region can create competitive pipelines. One country alone cannot, except in limited markets. For example, some possible pipelines for basic garments are:

- spinning in Botswana with weaving, fabric finishing, and garment production in Lesotho
- spinning in South Africa with knitting, fabric finishing, and garment production in Mauritius
- spinning in Mozambique with weaving and fabric finishing in South Africa and garment production back in Mozambique

In the following section, we review the policy, regulatory, institutional and macro-economic frameworks in which the region's textile and clothing industry operates.

Policies, Regulatory Framework, and Institutional and Macroeconomic Environment

The macroeconomic environment and regional and country-specific policies, regulations and institutions both constrain and encourage the development of the textile and clothing industries in the region. The pattern is diverse and only in some cases can generalizations be drawn. Where there are problems, some are general; and others, quite specific, as are the solutions. Moreover, even when the problems are common throughout the region, the institutional or policy remedies are often national, not regional, though sometimes a regional solution may be viable. In all cases, the guiding criterion is that any solution must change the environment to allow and encourage firms to become increasingly efficient and world-competitive, … able to turn the threat of globalization into an opportunity.

Macroeconomic Environment

Macroeconomic performance—the rates of growth, investment, inflation and real interest and the official versus secondary-market exchange rates—varies widely in the region. Whereas most countries in the region have moderate inflation, slow to moderate growth, and liberalized foreign-currency markets, Zimbabwe—the worst case—has a shrinking economy, massive inflation, high real interest rates, and a hugely overvalued currency, conditions that cut sales, increase costs, scare investors, make others want to flee, and slash trade with nearby countries. A few other countries still suffer significant inflation, overvalued foreign-exchange rates, and restrictions on access to foreign currency. For example, "the Malawi kwacha (MK) fell from MK 46.2 to the U.S. dollar at the end of January 2000 to MK 78 by mid October (*Nation* 27/10/2000:14)." In October 2000, its official exchange rate was still overvalued with the black-market demanding 10% to 13% more than the official rate; the inflation rate was about 30%, implying a 15% real interest rate, which a few months later rose to 25%, a cause for bitter complaints by Malawian investors who are unable to obtain foreign-currency loans (Coughlin and Undenge 2001:5). Zambia too has serious macro-economic imbalances that hamper manufacturers and intimidate investors. It has also re-imposed foreign currency controls. Tanzania, on the other hand, has liberalized foreign exchange markets, privatized many companies, and seems to have controlled its inflation to moderate levels (7.9% in 1999 and 5.0% in 2000) though its real long-term interest rate for loans remains high (14% to 20%). Along with other reforms, these changes have spurred investment in the Tanzanian textile and garment industries.

That foreign-exchange misalignment, overvaluation and fluctuations (and the associated uncertainty) discourage exports is well known both theoretically and finds considerable, though not unanimous, empirical support.[69] In Africa, for example,

> non-CFA countries experienced an average level of real exchange rate misalignment of approximately 20% over the 1970-95 period…. According to the estimated elasticities of export shares to misalignment, in the absence of misalignment, the ratio of export shares to GDP could have been higher by 70%, 100%, and 60% for textile, chemical, and metal products, respectively…. Moreover, one should also take into account the direct impact stemming from a lower level of the real exchange rate (RER), if it is assumed that RER

[69] See, for example, Collier (1997), Harvey and Hudson (1993), Gagnon (1993), Grobar (1993), and Paredes (1989).

misalignment is reversed through RER depreciation. According to our estimated elasticities of export shares to RER movements, a 20% RER depreciation could improve the total export share of the three industries by 0.3% of GDP. This puts our estimate of the direct impact of exchange-rate mismanagement on export shares of the three industries at 1.7% of GDP.

… This figure probably *underestimates* the overall negative incidence of exchange-rate mismanagement on manufactured exports. A better export performance is likely to improve productivity through learning effects, thanks to an improved allocation of production factors, as well as through economies of scale due to a bigger market size (Sekkat and Varoudakis 1998:44, emphasis added).

In another study, Tsikata (1999) found that South African "exports are highly sensitive to real exchange rates, world demand, and trade policy. The short-run exchange-rate elasticity is 0.8", that is, a 1% increase in the real exchange is associated with a 0.8% increase in exports (Lewis 2001:6). Similarly, Elbadawi (1999:13) using extended transaction-costs models found that "all of the four regressions find real exchange rate variability and the level effect of the terms of trade highly significant and negatively associated with manufacturing exports". He concluded that "real exchange rate-based competitiveness is a **pre-requisite** for a developing (especially low-income developing) country to become a successful exporter of manufactures". Indeed, "African countries that have been successful in promoting manufactured exports have implemented cautious exchange-rate policies, leading to steadily declining real exchange-rate overvaluation" (Elbadawi (1999:7).

Though most SADC member countries have implemented such policies, the difficulties in Malawi and Zambia and, above all, in Zimbabwe not only restrain growth in those countries but have large negative repercussions for trade and investment in the entire region, including for the textile and garment industries.[70]

Policies, Regulatory Framework, and Institutional Environment

A country's fiscal, technological and human-resource policies, the regulatory framework governing the establishment and functioning of corporations, and the institutions supporting and regulating economic activities strongly influence decisions to invest as well as the ongoing viability of a project. The following sections examine how this affects the textile and clothing industries in the region.

Tariffs, Other Taxes, Rebates, and Customs Regulations and Administration

The regulations and fiscal measures applying to imports and exports are contentious topics with diverse, strong interests lobbying and perhaps bribing to guarantee, modify, thwart or circumvent their implementation. As a result, policy sometimes becomes a *mythical system* supplanted by a *practical code* with unintended consequences hobbling rather than aiding industrialists (Hors 2001:16). In other cases, policy can have inadvertent, undesired results harmful to industry.[71]

Another difficulty arises when governments offer inducements and, with little or no warning, discontinue them. For example, Zambia for long had no foreign-exchange controls but, in December 2000, suddenly announced that:

[70] According to one study in Africa, if over a decade the annual growth rate falls (rises) by 1% in a country, then, ceteris paribus, the growth rate of its neighbour falls (rises) 0.55% (Easterly and Levine 1997 cited by Longo and Sekkat 2001:14).

[71] See, for example, how a change in tariffs inadvertently crippled the fishnets industry in Tanzania (Coughlin and Mworia 2001:25-26).

all exports are to be receipted locally with at least 75% of this amount to be deposited with local banks immediately upon receipt but in any case not exceeding 180 days from date of exporting. Remittances, other than dividends, by business entities will be made against invoices consistent with bills of entry collected by the tax office of the Zambia Revenue Authority. (In this respect, all businesses wishing to make remittances are required to furnish banks with invoices or supporting documentation). All external payments above $5,000 are to be channelled through commercial banks (Rubin and Mudenda 2001:6).

Likewise, in March 2001, the Botswana government suddenly announced that "the Financial Assistance Policy has been scrapped for foreigners and will apply only to new investments 'by citizens and nationals'. This policy offered large subsidies for wages, training, and capital investment and served to attract many new manufacturers (Rubin 2001:4). Such abrupt policy changes shake investor confidence about the reliability of the policy environment.

Besides such country-specify problems, the industrialists surveyed in the 11 SADC countries helped us to identify patterns where, repeatedly, in diverse countries they confront ill conceived or malfunctioning systems. It is on those patterns, not the minutiae of diverse systems, that this report focuses. The salient and common problems involve *(i)* the non-existence of provisions for or unnecessary limitations on export processing zones, *(ii)* the failure to rebate, suspend or eliminate tariffs and the value added tax (VAT) on inputs, spares, equipment, and purchased services used to produce exports, *(iii)* the apparent failure of South Africa's Customs Service to deduct the value of South African yarn or fabric before calculating the amount of duties payable; *(iv)* slow and often corrupt customs services, *(v)* the employment of time consuming import-inspection services to vet cargo beyond their competence to evaluate with adequate precision, *(vi)* counterproductive administrative methods for allocating national quotas among individual producers under the MMTZ-SACU textile and garment scheme, and *(vii)* the prolonged failure by many countries in the region to get a visa system approved by the U.S. Customs

Box 2.

Fiscal Incentives

A Key to Mauritius' Export Success

All raw materials, accessories, spares and production equipment for the textile and garment industries enter Mauritius *duty free*. Mauritius has also declared the whole island an export processing zone so that an investor merely has to obtain a site and the required local government licenses to be able to apply for a certificate as an export processing zone manufacturer. Originally, such producers received a 10-year tax holiday, but the government now applies a uniform 15% income tax on all manufacturers.

Elimination of tariffs brings many advantages. Pre-shipment inspections and the associated costs become unnecessary. Customs can drastically reduce how often cargo is physically inspected (the Mauritius customs authorities, using risk analysis, inspect just 3% of cargo containing textiles or clothing as opposed to 25% of other cargos). As a consequence, most cargo for the textile and clothing industries can be released immediately.

In addition to these fiscal measures, Mauritius has mitigated the impact of the surge in oil prices in 2000 by completely removing "the VAT on electricity consumption [and doubling] the customs duty exemptions granted the Central Electricity Board to Rs 100 million yearly. As a result, the rate of increase in electricity tariffs has been limited to 20% on average, instead of 32%" (Mauritius Ministry of Finance 2000:18). The VAT on water was also scrapped.

Service to make their exports to the U.S. eligible under the African Growth and Opportunity Act (AGOA).

Export Processing Zones

Whereas some countries (e.g., Tanzania, Zambia, Lesotho, South Africa) do not yet have export-processing-zone legislation, others impose unnecessary restrictions and so does the SADC Trade Protocol given the way most Member States have interpreted and applied it for EPZs. Unless a country has a smooth functioning duty-rebate or suspension system[72] or, alternatively, highly favourable special tariffs and regulations for the textile and garment industries as a priority sector, the lack of export-processing-zone legislation handicaps exporters and virtually guarantees that no investment, local or foreign, will occur in the sector to take over and rehabilitate existing factories or to set up new ones. This is Tanzania's and Zambia's predicament.[73]

Similarly, the International Monetary Fund's demand and the subsequent decree that limits EPZs in Mozambique to "groups of enterprises or large projects" in well demarcated geographical zones set aside for export processing will make it very difficult to attract buyers willing to buy and rehabilitate the various moribund textile mills in that country unless the decree is reinterpreted to permit moderate-sized individual factories to become EPZs (Coughlin 2001:7).[74] Lacking a clear definition, investors will retreat or hesitate; and, at best, vital time will be lost seeking an authoritative clarification. This rule has another, surely unforeseen consequence: it strongly discriminates against existing manufacturers, who are often local entrepreneurs. For example, in Zimbabwe, the directors of many firms expressed a strong desire to transform their plants into EPZs though the government, fearing a loss of revenue, refuses to authorize them to do so unless they shift their installations to an authorized zone, a prohibitively costly move. Moreover, when considering expansion, manufacturers confront a dilemma. To realize economies of scale, they must *either* move everything **into** an EPZ at great expenditure *or* expand near their present facilities in normal customs territory **outside** the EPZ, thus sacrificing the zone's benefits. Alternatively, they must split their operations to gain the benefits of the EPZ while sacrificing economies of scale. All are sub-optimal choices.

Various restrictions on EPZs also hamper the zones' use and efficacy. For example, Malawi prohibits EPZ firms from selling anything on the local market; whereas most other countries that permit EPZs allow them to sell between 15% to 20% of their output locally upon paying the duties and taxes due on the respective inputs.[75] The prohibition of local sales ignores a key characteristic of the textile and garment industries, namely, that they always produce overruns and seconds, which, in many cases, are best sold on the local market.[76]

---

[72] South Africa has a Duty Credit Certificate Scheme and two schemes for duty rebates and drawbacks (Jafta and Jeetah 2001:15-17).

[73] Tanzania's duty drawback scheme has considerable delays; and, as of late 2000, the country still had no EPZ legislation. Zambia has a duty-drawback scheme for exporters and the Ministry of Commerce and Industry has *proposed* but not yet passed legislation for EPZs that, though geographic, will be centred in the big textile producing areas. The proposed law applies to incremental as well as new investment (Rubin and Mudenda 2001: 6 to 8).

[74] The International Monetary Fund demanded the change "to better enforce customs control of the inflows and outflows of goods and services" in Mozambique. To our knowledge, the Fund has not yet demanded similar legislative changes in other SADC countries though Zimbabwe has long required EPZ firms to locate only in designated zones (IMF 2001).

[75] Namibia allows EPZ firms to sell up to 30% in the local market (Jeetah 2001:7).

[76] This is not a general rule. For example, due to the massive commercial and donor importation of second-hand clothing, one clothing factory (Belita) in Beira, Mozambique, reportedly sells all its seconds and overruns

Ironically, it also means that the exported goods will sometimes be purchased outside and sold locally by traders at prices that add the cost of two-way transportation plus margins. This regulation protects inefficient local producers who are unable to export and penalizes the generally more efficient EPZ firms. Worse yet, it protects no one if, as often happens, none of the non-EPZ local producers make the goods in question. In that case, the protection is for a phantom.

Similarly, SADC member states typically apply **external** tariffs to final products made in EPZs from other SADC countries. In practice, this excludes them from the SADC market except for those exporting under SACU-MMTZ quotas. The Trade Protocol has no explicit provision to allow EPZ factories to sell even a small fraction of their output within SADC except in the country where the factory is located. This policy, at least in practice, discriminates against some of the most efficient firms in the region, a questionable way to encourage development!

With the exception of income taxes, the fiscal rules for EPZ firms are fairly common throughout the region, typically involving a complete exemption from tariffs and VAT on all imports. Corporate income taxes, however, vary greatly. Malawi and Namibia grant EPZ firms an "indefinite exemption" against income taxes; Mozambique extends them a tax holiday for seven years after which such firms pay 1% on gross receipts; Zimbabwe gives them a five-year tax holiday after which they must pay 15% income tax; and Mauritius now applies a 15% income tax on all EPZ firms. Though Swaziland does not have an EPZ regime, it grants manufacturers producing for export a duty exemption on inputs. They also get a five-year tax holiday after which, if in the textile and clothing sector, they pay a 10% income tax till the tenth year whence it reverts to the normally applied 30% rate (Rubin 2001c:4). Botswana too has no provision for EPZs but applies zero tariffs to equipment, exempts exporters from duties and sales taxes on raw materials, and applies a 15% income tax on manufacturing firms as opposed to 25% for all other companies.

Since multinational corporations can easily minimize income taxes through transfer pricing on inputs or outputs, the above variations in rates are, in practice, inconsequential and certainly do not, in themselves, threaten cutthroat competition in incentives for foreign direct investment in the region. For mega-projects, other incentives such as subsidized infrastructure or electricity would surely be involved in any attempt to woo an investor to switch to another country, assuming that the general business ambience is similar in both.[77] In such cases, the rewards for the winning country are so high that, without a strong enforcement mechanism, it is nearly impossible to prevent such efforts. Nor is it desirable to try.

Tariffs and VAT

The failure to reimburse non-EPZ exporters for tariffs and VAT on inputs, spares, equipment and purchased services or gross delays in doing so are the most serious and common fiscal problems affecting exporters in the region. Where this occurs—e.g., Zimbabwe, Mozambique, and Tanzania—the law usually provides for the reimbursement of such tariffs and VAT. Implementation is the problem. Strapped for cash, the countries'

---

to international brokers because the local clothing market is saturated and would pay little for such goods.—interview with Niazi Hoolash, chief accountant and acting director, Belita, 21/12/2001

[77] For example, Ramatex was apparently enticed to abandon its negations with Buffalo City in the Eastern Cape in preference for a site in Namibia partly because of the lure and partly because of South Africa's delays and obstinately insufficient offers. "Namibia is believed to have offered Ramatex a 20-year tax holiday, free wharfage, free earthworks at the factory site and free electricity infrastructure up to the factory site. In Eastern Cape, the company was offered 100ha at the old Bisho airport site for R250,000, and reduced wharfage fees. The cabinet is believed to have rejected a more generous investment package, including a six-year tax break, proposed by those negotiating with the Malaysians" (*Business Day* 21/6/2001:1).

treasuries are sticklers about tiny errors on the applications and either succeed—deliberately or not—in repeatedly frustrating the manufacturers till they just quit submitting applications for reimbursements, or, failing that, pay the applicants off in deflated currency with no interest payments a year or two after the exportation occurred. For example:

- In Tanzania, manufacturers again and again informed us that only by collecting more VAT than they pay out could they get reimbursed for VAT paid on inputs and services. Thus, a successful exporter who sells little on the domestic market would, in practice, be penalized. Reportedly, the government is trying to improve the system by allowing monthly VAT refunds for exporters though no manufacturer informed us that he was benefiting from this system yet.[78] In at least one case—fishnets—the interminable delays severely hamper local production (Coughlin and Mworia 2001:25).

- In Zimbabwe, factories complained of delays of more than a year in getting refunds for duties paid on imported inputs used to produce exports. Faced with soaring inflation and denied interest payments on the funds thus tied up, the manufacturers are thereby burdened with a net tax on exports.

- In Mozambique, at first glance, it appears that the textile and garment industries have escaped the rebate problem, but a closer analysis reveals that this is not entirely so. None of Mozambican textile firms export at the moment; and all the clothing manufacturers that do, produce on a cut-make-and-trim basis and import raw materials paid for by their customers as temporary imports exempt from duties and VAT. However, if they were to begin to purchase their own cloth as is more usual in the industry internationally,[79] they might be able to get the duties suspended but would have to pay VAT and apply for a refund, a refund that is *extremely* difficult to get.

Even when the rules allow temporary importation of raw materials with suspended duties and VAT, they generally prohibit a local textile wholesaler from buying goods for export from a local factory without paying VAT. In a country where VAT refunds are grossly delayed or, worse, never paid to exporters, the insistence that wholesalers who buy textiles or garments for export pay VAT on the goods virtually prohibits the development of *local* wholesalers specializing in such exports unless they were mere agents earning commissions. No locally incorporated wholesaler could viably undertake this activity—especially in a country with few textile and garment manufacturers—unless located in an export service zone (non-existent in Mozambique) though, in practice, the merchandise would be shipped directly from the factory to the client. With ingenuity, such hurdles can be overcome,[80] …but at a cost, a cost that will stall or stop the project.[81]

---

[78] Tanzania has given a commitment to the International Monetary Fund to give no more VAT exemptions.—*Source:* interview with Ravi Chande, 2nd vice chairman, Confederation of Tanzanian Industry, 10/11/2000

[79] Still, cut-make-and-trim arrangements are also common; and producing that way is a strategic decision. It is not the most *advanced* practice but it is certainly not *abnormal*. It might limit the scope of clients they can deal with; but, in many cases, buyers *prefer* to work with such manufacturers. By doing so, they can control the fabric and accessory supply or use their large buying power to purchase the fabric cheaper than a small manufacturer in Mozambique.

[80] perhaps by creating off-shore companies

[81] Exactly this situation is currently stalling a significant long-term arrangement for clothing exports from Mozambique to the U.S. Though one factory desiring such an arrangement currently imports, duty- and VAT-free, all raw materials and exports 100% of its output, any deal that would momentarily shift the ownership of the goods to the wholesaler would, under the current interpretation of the regulations, immediately call forth the

Combined, fiscal pressures, bureaucratic stringencies, and rigid laws thus reduce the ability of entrepreneurs to manoeuvre around obstacles inhibiting their own and their nation's growth. Facing one obstacle, they turn … only to face another.

Another common problem is the lack of a mechanism to rebate tariffs to **indirect** exporters. For example, in the absence of such a clause, a garment manufacturer is penalized when buying cloth from a local mill. Though he may be able to get his VAT back, neither he nor the weaver can get a refund for the duties the weaver paid on imported inputs and, perhaps, spare parts. Though integrated factories have no such problems, the common lack of a rebate mechanism for duties paid by indirect exporters discourages the creation of export-oriented pipelines comprising independent producers within the same national territory. A counterexample is given by Mauritius. Since the whole island is a virtual EPZ for the textile and garment industries, large producers subcontract small independents for specialized embroidery, cutting and sewing services. Taxes are not an obstacle. They are, however, in SACU.

> SACU customs regulations make it almost impossible for SMEs to subcontract with large exporters. The SACU regulations allow the duty-free import of raw materials, if such materials are used to manufacture for export. To qualify for exemption from SACU duties on imported raw material, a manufacturer must have a customer outside SACU.[82] Since the SMEs' customers are Lesotho-based manufacturers, they are not exempt from import duties even if that customer ultimately exports their products.
>
> To overcome this restriction, the Lesotho Manufacturers Association is trying to group several small operators in one physical space where they can set up customs bonded operations.

Relocating SMEs is, however, an awkward solution. Easier would be to *(i)* require the large manufacturer to guarantee that the subcontractors will return transformed inputs to his bonded warehouse, *(ii)* control this with transformation ratios, and *(iii)* impose tariffs, taxes and fines for any unreturned inputs. If the large manufacturer is an EPZ firm, then the solution is equally easy: permit him to release inputs to subcontractors on the basis of a temporary importation license.

South Africa's Tariff Calculations

Though the South African customs authorities are supposed to deduct the value of South African fabric used to produce imported clothing, producers, especially in Zimbabwe, *repeatedly* alleged that, in fact, the authorities require importers to pay duties on the full value of such garments. If true, this would clearly run contrary to the economic interests of South Africa itself as well as violate the spirit of the SADC Trade Protocol. An investigation is required.

Pre-Shipment Inspection and Customs Clearance Procedures

Delays and unreliability in the delivery chain can doom a factory desiring to gain or keep international customers, especially in textiles and clothing. Whenever regulations or an administrative decision requires that a high percentage of a certain cargo be inspected, the

---

imposition of VAT, a tax whose prompt refund is heavily doubted. Without a specific waiver for their arrangement, the wholesaler would have to endure delays and incur expenses to set up *(i)* an export company in an industrial free zone—something not expressly permitted in the current legislation—or *(ii)* an import company in the U.S., either way, a daunting prerequisite.

[82] SACU regulation 470.03, cited by Peter Tsoafoe, Director of the Lesotho Manufacturers Association. Firms operating under this regulation must sell *everything* outside SACU.

direct costs and the secondary repercussions are onerous. For example, South Africa's customs authorities have placed fabric on the high-risk list and often insist on inspecting such containers in transit to other SADC countries. Moreover, for Swaziland, the authorities require that such cargo be transported by the South African Railways, which, according to the complaints of manufacturers in Swaziland, is slow and unpredictable in delivering imports.[83] By contrast, apparel exported from Swaziland via Durban is not on the high-risk list and may go by rail or road. Given the competition, these shipments arrive on time.

When deciding on the frequency of physical inspections, the customs authorities must understand that inspections and the consequent delays and unpredictability impose costs and have adverse implications for manufacturers and the nation. Factories are idled; deliveries are delayed; and clients get scared off. If inspections are frequent, the customs administration itself becomes overburdened and clogged. Some countries (e.g., Tanzania) even vet shipments *three times:* once overseas, then by customs, and afterwards documentation and valuation are vetted by an independent local auditor (charging a fee!) before the goods are released. Moreover, pre-shipment inspection typically adds 1.5% to 2% to the c.i.f. costs.[84] Each inspection *before* or *after* the arrival of the cargo implies costs in **time** and **money** and increases the **unreliability** of the entire process, an unreliability causing unplanned delays that can silence factories while they wait for imported inputs delayed by the pre-shipment inspectors or stuck in the port awaiting customs clearance.

Since inspections occur mainly to prevent customs fraud, two ways to cut the need for them are *(i)* the reduction or, when economically justified, the elimination of tariffs and *(ii)* the use of sophisticated analysis of risks coupled with random inspection of cargo, the frequency of which is determined by the risk associated with a specific shipment. Low tariff levels reduce the incentives for corruption and, hence, the need for frequent inspection; zero tariffs *completely* eliminate the need for inspections, except to catch smugglers; and risk analysis focuses and cuts the frequency of inspections. Such systems increase net fiscal receipts while greatly reducing the delays and the direct and indirect costs for honest manufacturers. Or, if applied to a tariff-exempt product category, they randomly flag a small percentage of cargo for inspection to create a significant risk of discovery for smugglers and those engaged in trans-shipment (Box 3).

---

[83] "Shipment between Swaziland and Durban is overnight by road. Rail shipments take between six and eight days by rail from Durban to Matsapha and about three days from Matsapha to Durban" (Rubin 2001c:19).

[84] The efficacy of pre-shipment inspection itself is disputed. For example, under the subtitle "Measures that Do Not Work: Examples from Pakistan, Bolivia and the Philippines", Hors (2001:23-24) concluded that "while the services provided by [Cotecna and Société Générale de Surveillance] reduced the abusive exercise of discretion by customs officers, in respect of verification, they made no real impression on the corruption problem. Firstly, corrupt practices were displaced to other points in the clearance process. Secondly, once identical shipments were found to have been valued differently by the same verification firm, the information on value, provided by these services, was no longer considered as reliable. [Moreover,] … the personnel of these firms, themselves, were not immune from corruption. Competition between the three firms, intended to lower costs borne by importers, stimulated the development of corrupt practices, for example, the undervaluation of consignments in order to attract customers." In Pakistan, "in November 1996, the government was dismissed on charges of corruption and the conditions under which pre-shipment inspection service contracts had been concluded were investigated by the Accountability Cell, revealing that the two companies had made payments, into foreign bank accounts, in favour of the then President, Benazir Bhutto and her spouse."

A study of two African countries was slightly more positive about pre-shipment inspection services. It concluded that "to help reduce fraud, donors need to support institutional reforms which reduce discretion and which improve possibilities for monitoring the actions of individual officials. Evidence from Senegal and Mali suggests that hiring a pre-shipment inspection company can be a useful tool for reducing fraud but, in order to be effective, pre-shipment inspection needs to be accompanied by reforms within the customs which ensure that the pre-shipment inspection company has access to the information it needs to carry out its duties. The key institutional reform here in both Senegal and Mail has been to computerize the customs service, a reform whose importance has not been fully emphasized in previous studies" (Stasavage and Daubrée 1998:31).

At present, however, many governments in the region have manual systems subject to large and variable delays, especially for imports. In the worse cases—Zimbabwe, Mozambique and Tanzania—the customs service delays cargos of raw materials, on average, by nine days as opposed to two, three or four days in all the other countries (Table 18) and receives strongly negative ratings by manufacturers (Table 19). The long delays are also symptomatic of big and unpredictable variations that greatly perturb their production planning and cause late deliveries to the client. Since international clients expect 95% on-time deliveries, repeated failure to meet deadlines can mean losing the client, as happened recently with a Mozambican knitwear factory, in this case its only client. Unable to sell but small orders, the factory now runs at a tenth of its capacity, with workers chatting or sleeping at their posts.

The failure to unify border inspection posts and to install computer systems to provide customs officials with comprehensive electronic records of a cargo's history also slows cargo and abets corruption. If it is transit cargo imported from overseas, an electronic-data-transfer system would provide reliable information all the way from the seaport, e.g., Durban, as it passes subsequent borders. Border unification also helps to reduce corruption because exporters and importers have conflicting goals, which, if their interface with customs occurs simultaneously, would assist in revealing the truth about the shipment. For example, a trans-porter, upon exiting SACU, will desire to declare the **full value** of the cargo and apply for a refund if he has paid VAT, but, upon crossing, no-man's land and entering the neighbouring country, may try to switch invoices and **underdeclare** the merchandise in order to minimize the duties to be paid. Finally, with an integrated risk analysis utilising information from the central customs administration on both sides of the border, physical inspections can be more focused and reduced in frequency.

Box 3.

Electronic Data Based Customs Management System in Mauritius

Mauritius has by far the most electronically integrated and efficient customs-clearance administration in the region. Till 1997, the customs authorities utilized the ASYCUDA system but had difficulty maintaining it because the computer-service technicians had to come from abroad. Beginning in 1997, they phased in the locally designed Customs Management System together with electronic data system based on the United Nation's Electronic Data Interchange for Administration of Commerce and Transport (EDIFACT) as recommended by the World Customs Organization. To protect the system against hackers and prying eyes, external users communicate via TradeNet, an electronic mailbox on an intermediate server that periodically transfers information to and from the customs' server, thus severing the direct link between customs and its diverse information sources, e.g., companies, cargo agents, and other government departments.

The implementation of the Customs Management System entailed:

1. "transmission of release notification to the Mauritius Ports Authority;
2. reception of electronic manifest data from the shipping agents and clearing and forwarding agents";
3. electronic processing of "import and export declarations and payment of duties and VAT";
4. movement of containers with multiple consignees in preparation for unstuffing;
5. electronic approval of import/export permits required for a few exports and for 10% to 15% of imports; and
6. "electronic approval of certificates of origin (EUR1, Comesa, etc.)".

The first five phases are now operational; and the last, the electronic approval of certificates of origin, will be implemented in June 2001.

The new system has many advantages for the government as well as for exporters and importers. Being electronic, the system not only improves the speed and accuracy of data entry and responses and cuts personnel requirements but also greatly enhances the customs' ability to identify and manage risks scientifically and focus more efforts on high-risk transactions identified by diverse indicators (e.g., origin, importer, declarant, type of cargo, tariff rate, freight-to-manifest comparisons). This also simplifies the work for low-risk transactions though even these are subject to a random, albeit low, probability of inspection to induce caution even in traders who might learn the risk profiles used by customs. By eliminating many face-to-face encounters, making the criteria for decisions more objective, consistent and transparent, and maintaining a clear documentary trail and, hence, increasing accountability, the system also reduces opportunities for malpractices and makes its easier for customs supervisors to monitor transactions and each officer's performance. With all the data computerized, statistics—both supervisory and general purpose—are also easier to generate.

Less corruption, increased tax revenues, and fast clearance of cargo are the results. In general, only 25% of goods are physically inspected; and many goods are cleared even before they arrive. For EPZs, including most textile and garment producers, customs randomly inspects only 2% to 3% of shipments since the "task is greatly simplified because most EPZs are duty free and they may sell on the local market". Of course, this sampling procedure is buttressed by a systematic risk analysis. When the goods do not require inspection, their clearance takes only about 15 minutes!

In addition to inspecting cargo, the customs authorities physically inspect the premises of about 15% of the EPZ factories each year to protect against trans-shipments by verifying that they do, in fact, have sufficient capacity to produce the volume of exports declared.

Besides speedy clearances, traders benefit because the computer system is available 24 hours a day, seven days a week. Moreover, when a trader fills in an electronic declaration form, the system automatically uses the most current tariff rates and does all calculations, thus eliminating the numerous clerical errors common in manual systems. With the approving agencies all on-line (e.g., health, agriculture, police, defence), permits, when required, are also issued quickly; and traders can easily verify the status of their declarations on-line. Finally, as the speed and reliability of the system are confirmed through repeated use, traders soon begin to rely on that to plan their activities, … project costs, [and deliveries] with more precision.

Source: reproduced from Jeetah and Coughlin (2001:9-10)

Table 18. *Average responses about customs clearance delays and their impact on sales and inventories*

Question:	(a) **Increase inventories?** *(0=no; 1=yes)*	(b) **Increase in inventories?** *(%)*	(c) **Reduce sales?** *(scale in note c)*	(d) **Days lost clearing cargo?** *(average days)*
Malawi	0.4	6.7	0.4	2.3
Lesotho	0.0	0.0	0.0	2.3
Mauritius	0.2		0.2	2.4
Zambia	0.0		0.0	2.8
Namibia	0.3		0.5	3.1
Botswana	0.0		0.0	3.5
Swaziland	0.3	7.5	0.3	3.7
South Africa	0.3	16.5	1.0	4.3
Mozambique	0.8		1.7	7.5
Zimbabwe	0.6	12.8	1.4	9.3
Tanzania (through Dar es Salaam)	0.6	17.0	1.9	11.2
Average	**0.3**	**10.1**	**0.7**	**4.8**
Memo: Tanzania (through Tanga)	0.5	0.0	.05	3.0

Note: Blank means the information is not available.

[a] Do delays in custom clearance of inputs cause you to increase your inventories?

[b] If so, by how much do you increase your inventories? %

[c] Do delays in custom clearance of inputs affect the volume of your sales orders?
(0 = no; 1 = negligibly; 2 = somewhat; 3=Severely)

[d] How many days are typically lost in clearing goods?

Table 19. *Manufacturers' evaluation of customs services, 2000*

	Overall average	**Botswana**	**Namibia**	**Zambia**	**Mauritius**	**Swaziland**	**Malawi**	**South Africa**	**Lesotho**	**Zimbabwe**	**Tanzania** (Dar es Salaam)	**Mozam-bique**	**Tanzania** (Tanga)
Land & Sea Transport													
Imports													
Speed	2.9	4.2	4.0	3.9	3.3	3.3	3.1	2.9	2.7	1.8	1.6	1.5	4.5
Consistency of service	3.1	4.3	3.5	4.0	3.5	3.3	3.1	3.5	2.3	2.0	1.9	2.3	4.5
Simplicity of procedures	3.1	4.2	3.3	3.9	3.5	3.0	2.9	3.3	4.7	2.0	1.6	1.9	4.5
Integrity	3.1	4.6	4.5	3.3	3.5	3.1	2.8	2.5	4.0		1.6	1.1	4.5
Exports													
Speed	3.6	4.7	3.5	3.9	3.2	4.0	3.7	4.0	4.0	3.1	2.6	2.8	5.0
Consistency of service	3.6	4.3	3.5	4.4	3.4	3.5	3.4	4.1	4.0	3.0	2.6	3.2	4.5
Simplicity of procedures	3.5	4.5	3.5	3.6	3.3	3.5	3.5	3.7	4.7	2.8	2.6	2.6	4.5
Integrity	3.5	4.5	4.0	3.7	3.5	3.8	3.4	3.6	4.7		2.2	1.8	4.5
Air Transport													
Imports													
Speed	3.3	4.7	4.0	4.2	3.8	3.2	3.8	2.5			2.8	1.0	4.0
Consistency of service	3.5	4.2	3.3	4.3	3.8	3.6	3.7	2.8			2.7	2.7	4.0
Simplicity of procedures	3.3	4.3	3.3	4.0	3.5	3.6	3.5	2.8			2.7	1.7	3.0
Integrity	3.2	5.0	4.3	3.4	3.5	3.6	3.5	2.7			1.5	1.0	4.0
Exports													
Speed	3.9	5.0	4.5	3.6	3.7	4.2	4.2	3.9			4.0	2.0	4.5
Consistency of service	3.9	5.0	3.5	4.0	3.6	4.2	3.8	4.1			3.0	3.5	4.5
Simplicity of procedures	3.7	5.0	4.0	3.0	3.4	4.2	3.8	3.9			3.0	2.5	4.5
Integrity	3.5	5.0	4.5	3.4	3.5	4.2	3.8	3.0			3.0	1.0	4.5
Aver. import clearance delay (days)[2]		3.5	3.1	2.8	2.4	3.7	2.3	4.3	2.3	9.3	10.3	7.5	3.0

Note: 0 = very bad; 1 = bad; 2 = poor; 3 = good; 4 = very good; 5 = excellent. Blank means the information is not available.

[1] The overall average includes the values for Dar es Salaam, not Tanga, for Tanzania. Tanga's values are included here for reference.

[2] as reported by interviewees

Allocation of SACU-MMTZ Quotas to Individual Producers

Since the quotas that SACU grants the MMTZ countries are greatly inferior to their productive capacities (Table 27), serious problems sometimes arise in the allocation of the quotas between producers. In Mozambique, the Ministry of Commerce and Industry allocates the quota on a first-come-first-serve basis for *shipments*. Since no provision exists to recognize orders backed by irrevocable letters of credit, both manufacturers and their customers run a grave risk of receiving no quota by the time the products are ready. Moreover, the first-come-first-serve allocation system does not provide any incentives for firms to become more efficient or to move into the highly competitive European and American markets. For example, a portion of the quota might serve as a reward for firms that increase their exports to non-SADC markets.

Labour Regulations and Work Permits

In most SADC countries, the manufacturers viewed the existing labour regulations as but minor impediments to their operations, though in four countries—Botswana, Mozambique, Swaziland, and Zimbabwe—the regulations are deemed *important* constraints on capacity utilization, and in South Africa, they are deemed *very important* (Table 20). The most frequent complaint was about the tedious and expensive regulatory process for firing workers, even for those caught stealing. But even in countries where such complaints were voiced, the manufacturers' opinions were far from unanimous. While some complained bitterly of the legal and bureaucratic exigencies surrounding the dismissal of employees and the concomitant costs, others tried to avoid dismissals, preferred to use managerial and motivational techniques to minimize such cases, and claimed, moreover, that, so long as the personnel records are kept well and the legally required steps leading to a dismissal are properly followed, employees can be dismissed … slowly … with a little patience and moderate costs. Such manufacturers typically criticized the more dismissal-prone firms as using backward and ineffective techniques to motivate and discipline workers. Another complaint, voiced above all in Mozambique, was about the stringent restrictions on hours and overtime. There, with some exceptions, the normal week is 48 hours; and no more than 2-hours overtime per day is permitted up to a maximum of 100-hours overtime per year (Mozambique 1999: articles 28 and 33).

For some employers, however, their answers were limited by their vision. For example, though piecework rates for individuals or teams are widely used to spur productivity in the clothing industry in Asia and Latin America, very rare were the factories in SADC, except in Mauritius and Namibia, that used such payments to inspire higher productivity even where these are allowed. Not surprisingly, in countries that prohibit wages based on piecework,[85] the manufacturers in general did not complain about the restriction despite their low output per worker ratios. Few even pay significant productivity bonuses, much less piecework rates despite the efficacy of such systems.

Without exception, all countries in the region experience "very important" constraints due to shortages of properly trained staff for the textile and clothing industries (Table 20). As a consequence, when a country's rules and administration for the issuance of work permits to expatriates are cumbersome, unpredictable and sometimes thoroughly corrupt, the efficiency and profitability of factories declines and with that the country's attractiveness for investors. On all scores, the worst case is Mozambique: two ministries are involved; employers must apply for a work permit *before* the expatriate is admitted to the country and may obtain a

[85] Lesotho prohibits piece-rate payments; and Botswana prohibits it for firms receiving subsidies for wages, training, and capital under the Financial Assistance Policy (Rubin 2001a:14 and 2001b:9).

resident's permit;[86] and the process is notoriously slow, complicated and corrupt. According to a recent study,

> 82% of investors with foreign workers considered the procedures to be slow and complicated…. The few cases in which [the interviewees] thought that the process was not complicated involved companies that had lawyers on their staff or had employed consultants, lawyers or influential people with strong links with the institutions connected with the legalization of contracts for foreign workers. [Moreover,] of the 31 interviewees, the majority (65%) mentioned that they had been subject to **illicit charges** (Macamo 2000:21 emphasis added).

No wonder managers in Mozambican factories consider the problems associated with getting work permits to be an "extremely important" constraint on the utilization of their factories' capacity. In Lesotho, Botswana and Malawi, such difficulties were deemed "very important", while, in all other SADC countries, the managers were bothered much less by them (Table 20).[87] For example, in Lesotho and Swaziland firms are given quotas for expatriates or for certain key staff such as the production manager and the managing director. If these are approved routinely and quickly the senior government officials can concentrate their efforts on approving the occasional exceptional cases.

On another scale, South Africa, Mozambique and Zimbabwe are deemed the countries where work permits are the hardest to get (Table 21). Moreover, in addition to the delays, the rules are sometimes quite impractical. For example, instead of evaluating whether the *post* still needs to be filled by an expatriate, Malawi normally refuses to renew an expatriate's work permit beyond six years regardless whether the post will continue to be filled by a foreigner. When a local person is still not available for that post, the insistence on bringing in a new expatriate imposes an often unsettling discontinuity in management. Such restrictions on the issuance of work permits are critical when governments hamstring entrepreneurs by interfering with and delaying their choice of a management team, including supervisors who, in the textile and clothing industries, are the key personnel on the factory floor. Without dynamic, well trained floor supervisors, productivity and quality droop threatening the industry's viability.

Where the approval of work permits is fraught with corruption and unjustified delays, the system must be streamlined to radically reduce the number of discretionary decisions by officials. Indeed, some SADC countries apply controls on expatriate labour that are easy to comply with and even guarantee investors the automatic right to employ a certain number of expatriates. For example, Tanzania allows investors to employ five expatriates virtually automatically; and Lesotho has an informal rule allowing up to five expatriates per 100 employees. These rules reduce the scope for arbitrary discretion and, sometimes, extortion by bureaucrats, an abuse that can menace a firm's profitability and, if pervasive, a country's attractiveness as an investment destination. Though governments need to promote

[86] To circumvent this eminently impractical rule, some companies bring in personnel on 30-day tourist visas and send them out of the country to renew it periodically till, eventually, the work permit is approved, a process that often takes three to six months or even more and imposes costs, frustrations and uncertainty upon both the company and the expatriate employee, who, meanwhile, cannot bring in his family. Disgusted at such abuse, the employee sometimes quits, in which case the company has to find a replacement and begin the paperwork again.

[87] Despite Lesotho's informal rule allowing five expatriates per 100 employees, our interviewees complained that the restrictions on work permits was a very important constraint on capacity utilization and that such permits are somewhat difficult to get (Table 20 and Table 21). This may be because their factories customarily fill nearly all supervisory, technical and managerial positions with foreigners mainly from Asia and use nearly all their automatic rights to permits.

employment and training for their citizens, they must also respect the industrialist's need to choose, without grave hindrances, a good management team.

The panorama of rules governing the employment of expatriates hinders the region's ability to benefit from underutilized or unemployed skilled, technical and managerial talent available in the region. Despite the general shortage of such people in the region in these industries, some countries whose textile and garment industries have been shrinking—e.g., Zimbabwe and Tanzania—have an *oversupply* of certain categories of skilled workers, supervisors and managers. For example, with the crisis in Zimbabwe, many have been emigrating legally and illegally to SACU countries and a few, to other countries. Rather than recruiting so many supervisors and managers from Asia, who cost more than local cadre and sometimes lack cultural sensitivity, the SADC countries should consider facilitating the movement within the region of supervisors, high-level technicians, and managers in this industry. Easy migration of such personnel within the region would reduce, but not eliminate, the need for expatriates from other countries.

Table 20. *Constraints on capacity utilization: Labour-law restrictions, work permits, and availability of properly trained staff (average responses)*

	Labour-law restrictions	Work permits	Inadequate availability of properly trained staff		Labour-law restrictions	Work permits	Inadequate availability of properly trained staff
Lesotho	0.0	2.3	2.0	Botswana	1.0	1.8	1.8
Namibia	0.0	1.0	2.2	Zimbabwe	1.0	0.6	1.7
Malawi	0.3	1.8	1.7	Mozambique	1.1	2.8	2.3
Mauritius	0.5	1.1	2.2	Swaziland	1.3	1.6	1.7
Zambia	0.6	0.5	1.8	South Africa	1.9	1.2	1.8
Tanzania	0.7	1.1	2.0				

Note: 0 = not important; 1 = important; 2 = very important; 3 = extremely important

Table 21. *Degree of difficulty in getting work permits for foreign workers (average responses)*

	Managers	Supervisors	Skilled technicians		Managers	Supervisors	Skilled technicians
South Africa	4.7	5.0	5.0	Mauritius	1.9	2.0	2.1
Mozambique	4.3	4.3	4.3	Tanzania	1.9	2.4	4.3
Zimbabwe	4.2	4.1	4.0	Botswana	1.4	1.4	2.0
Lesotho	3.2	3.2	3.2	Zambia	0.0	1.3	1.3
Swaziland	2.3	2.3	2.3				
Malawi	2.2	2.4	3.1	Namibia*	n.a.	n.a.	n.a.

Note: 0 = easy; … 5 = extremely difficult; n.a. = not available

* Since only one manufacturer responded to this question in Namibia, the answer is not reported here.

Company Formation and Project Approval

Though our survey data is incomplete, the countries that have been most successful in attracting investment in the textile and clothing industries seem also to have the most

expeditious procedures for company formation and approval of diverse licenses. For example, in Botswana, Swaziland and South Africa, it takes a month or less; in Lesotho, three to six months; and, in Mauritius, two to eight months (Lall and Wignaraja 1998:134; Niekerk 2001). Indeed,

> creating a company in Swaziland is simple, quick, and inexpensive. The most effective way to do so is to channel the whole process through the Swaziland Investment Promotion Authority (SIPA). After presenting a business plan to SIPA, the company files a Memorandum of Association and Articles of Incorporation with the Registrar of Companies at the Ministry of Justice. The company then applies for a trade license with the Ministry of Employment and Enterprise. The whole process takes, at most, **a month** and costs between E2,500 ($308) and E3,700 ($456) (Rubin 2001c:6, *emphasis added*).

This compares very favourably with the average processing times reported in many of the Asian newly industrializing countries. For example, the "average processing time for foreign investment approvals" is a month or less in Singapore, Sri Lanka, and Thailand and one to two months in Thailand, Indonesia and Taiwan (Lall and Wignaraja 1998:134).

By contrast, in Mozambique, a country attracting *very little* investment in this sector, 42% of the respondents in a recent study about "Administrative Barriers to Investment in Mozambique" reported that it took them more than 12 months to get all required documentation together and obtain necessary registrations and approvals required before being able to initiate their projects; another 46% required six to 12 months (Macamo 2000:15). Only 3% got everything in less than three months. Such delays are disastrous, especially for the textile and garment industry, because a major motive that foreign firms in this sector have for investing in a less developed sub-Saharan country, is that by locating there they may export clothing to the U.S. independently of where the fabric is made, a privilege that will expire on 30 September 2004. Wasting a year or more to approve a project is intolerable to such investors. They will go elsewhere!

To try to overcome such problems, many countries—often as part of structural adjustment programmes—are simplifying their procedures by cutting out unnecessary approvals and allowing the requests for others to be submitted simultaneously instead of sequentially. Most are also in different stages of converting their investment promotion centres into one-stop shops, where investors can swiftly get all the various licenses and approvals, as done in Swaziland's now truly one-stop shop run under the auspices of SIPA (Swaziland Investment Promotion Authority).

Manpower Training Institutions and Incentives

With the exception of South Africa and to a lesser extent Mauritius, very little *formal* training of skilled personnel, technicians, supervisors and managers occurs in the textile and clothing industries in the region. Typically, the training that occurs is *informal* and on the shop floor. In-factory training schools are extremely rare and present only in some of the best, most efficient factories in the region. Textile and clothing technology and training institutions only exist in Mauritius and South Africa and then with significant gaps in coverage:[88]

[88] In Zimbabwe, "the National University of Science and Technology in Bulawayo intends to open a Department of Textile Technology … [in 2001]. The Department of Textile Technology, which will soon be opened by the University of Science and Technology, will provide some specialized training" (Coughlin *et al.* 2001:11).

- In Mauritius, the Industrial and Vocational Training Board offers a Higher National Diploma in fashion and design; and "other institutions also offer courses related to the textile and clothing industries. The Clothing Technology Centre, the technical arm of the Export Processing Zone Development Authority (EPZDA), utilizes qualified experts in textile and clothing from Mauritius or abroad to teach a variety of courses year round, for example: industrial pattern making, circular knitting, optimal sewing methods, screen printing, and line management.[89] The textile technology department of the University of Mauritius also offers B.Sc. degrees in textile technology and textile fashion and design; and the Manchester Metropolitan University offers a Higher National Diploma/B.Sc. in clothing production management in collaboration with the Professor Basdeo Bissoondoyal College. Moreover, at least five training institutions are registered with the Industrial and Vocational Training Board to cater for training needs in textiles and clothing[90] while the tertiary educational sector caters for middle management positions in design and production of textiles and clothing" (Jeetah and Coughlin 2001:11).

- In South Africa, under the new Qualifications Authority, the textile and clothing sector authority "has to register courses to be accredited by the qualifications authority. Industry representatives participate in the development of training courses for the industry through the relevant Standards Generating Body. ….

  "Several courses for the textile industry have already been accredited. A new degree course in Textile Technology was introduced at Peninsula Technikon [in 2000]…. The clothing industry is developing a Clothing Qualifications Framework as part of the National Qualifications Framework. … Students interested in the clothing industry can be trained at tertiary level through career-orientated courses at technikons. … The South African Bureau of Standards [also] provides training countrywide; … [and] Textek offers a wide range of training … aimed primarily at entry-level managers and supervisors….

  "The Workplace Challenge is a joint initiative of Nedlac and the Department of Trade and Industry … aimed at transforming workplace practices and work organization … and encourag[ing] workers and management to work together to improve how South African industry delivers products and services to the market. The Workplace Challenge process includes establishing and training plant-level consultative forums, … developing training plans and career paths, [and] identifying and developing new forms of work organization and job re-design as well as developing and implementing new remuneration systems, especially those linked to skills and performance….

  "The Western Cape Clothing and Textile Service Centre (Clotex) facilitates training mostly … for small and medium enterprises (Jafta and Jeetah 2001:26-27).

Even in Mauritius and South Africa, where some training facilities exist, only 40% of our respondents deemed that the courses offered are "sufficient for the needs of their industry" (Table 22). Elsewhere, except for Lesotho, the responses were even less favourable. Except for Mauritius, Botswana and South Africa, the "lack of appropriate training institutions" is considered a very or extremely important barrier to the use of formal training despite its acknowledged utility to the industry. In the seven countries where we asked interviewees to

[89] The Clothing Technology Centre is currently setting up a model clothing factory to train managers and other personnel in the latest techniques and systems for the manufacture of clothing.

[90] Industrial and Vocational Training Board's website, http://ncb.intnet.mu/ivtb/dir_tx.htm, accessed on 13/4/2001

indicate whether they would support or oppose a proposal to institute a training levy on salaries to create a fund from which to reimburse employers for training expenses, the *overwhelming majority* strongly endorsed the proposal, with the caveat that most were sceptical of government and believed that the fund should be run by a semi-autonomous body "appointed by the private sector with formal approval by the government" (Table 23). Only one company preferred the fund to be administered by the state.

At present Mauritius and South Africa have well-functioning training levy schemes; Malawi's recently adopted scheme has yet to be implemented; and, though Tanzania has a scheme, it only finances the state-run school and does not reimburse companies for training expenses. In South Africa,

> under the Skills Development Levies Act of 1999, a levy-grant system has been introduced under which each employer has to pay 1% of total payroll (from 1 April 2001) to fund skills development. The South African Revenue Service collects the skills levies. Twenty percent of this revenue is paid into the National Skills Development Fund for training of the unemployed; the rest is paid to the sector authority for disbursement. Firms who already train their employees are entitled to reimbursement of expenses. There is no restriction on training at foreign institutions (Jafta and Jeetah 2001:24 and 26).

In Mauritius,

> a training levy equal to 1% of total wages is payable monthly together with the National Pensions Scheme remittance. Companies paying 15% or less as corporate tax[91] are entitled to a 70% grant comprising *(i)* a direct training grant of 53% of the training expenditures whether incurred in-house or overseas, but not exceeding Rs 100,000 ($3,675) — a tiny value for a big company — plus *(ii)* an additional 17% that may be offset against the corporate tax payable by the company.

Though much literature exists showing the efficacy of such levies in promoting training (e.g., in Taiwan, China, Singapore, Malaysia, Mauritius and Kenya), most governments in the region have not yet considered this as a way to promote training (Box 4). Such levies help to *(i)* offset the daunting costs of in-factory training, *(ii)* compensate for the tendency by many managers to underestimate the value of training, new technology and managerial systems, *(iii)* overcome the notorious fear by managers that, if they invest heavily in training, they will lose because others who invest nothing benefit by luring away the newly trained workers—a classic problem of malfunctioning of the market arising when an investor must pay for but cannot benefit from all the externalities he creates, and *(iv)* encourage other parties to respond to the increased demand by setting up training schools. With a training levy, those who train are reimbursed, in large part, by those who only employ, but never train, skilled workers. Justice! And entrepreneurs like the idea.

According to the needs, such funds can finance training in in-factory schools as well as in local, regional or international training institutions. For operators and supervisors, formal in-factory training can be emphasized since that usually guarantees the training's relevance and takes advantage of much of the equipment already installed. Moreover, the fund can offer to subsidize the capital equipment used in training as a leverage to encourage factories to open their schools, for a fee, to a few employees from other firms. This is especially feasible in best-practice export-oriented factories that would feel no threat in their markets from the additional firms benefiting from the training.

Historically, the countries in the region need many more nationals to be trained as managers and high-level technicians. Any policy that discourages their preparation forces

[91] In Mauritius, all firms, including those in export processing zones, now pay 15% corporate tax.

manufacturers to insist on bringing in expatriates. The policy, whatever its motives, becomes then anti-nationalist. Unfortunately, in some countries in the region, the rules covering the use of the training fund make exactly this error.[92] For example, in Malawi,

> the Technical, Entrepreneurial and Vocational Education and Training (TEVET) Authority is mandated to target or focus on training 'technical and vocational skills up to technician level'. Tertiary training is ignored. The scheme does not reimburse companies for training outside Malawi; and only one company had sent anyone abroad for training. Significantly, this was the only company where black Malawians were the production and sales managers. TEVET's insistence on not reimbursing companies for foreign training stymies the promotion of Malawians to significant managerial posts. Whereas the country urgently needs to train Malawians to be senior managers and technicians and that can only be done outside the country, [the TEVET Authority's] insistence on financing only local training … will prolong the country's dependence on expatriates (Coughlin and Undenge 2001:9).

Within the region, Mauritius and South Africa have a 1% levy; Tanzania, a 2% levy; and Malawi, 2% (in law but not yet implemented). In Mauritius and South Africa, the fund reimburses employers, but, in Tanzania, it only finances a government-run training institution as will happen in Malawi whenever the new law begins to be implemented. Outside the region, the rates are sometimes higher, an extreme example being Taiwan where the training levy is 5% for medium and large firms (Lall and Wignaraja 1998:77).

Table 22. *Barriers to and use of formal training (average responses)*

	What are the main barriers to formal training?*					**Courses sufficient for needs of industry?** (% yes)
	Lack of appropriate training institutions?	**Training programmes not well adjusted to company's needs?**	**Risk of employee abandoning company?**	**High cost of formal training?**	**Low usefulness of formal training?**	
Mauritius	1.1	1.8	0.8	0.4	0.2	40%
Botswana	1.2	1.0	0.5	0.2	0.3	20%
South Africa	1.4	1.5	0.5	1.4	0.6	40%
Zimbabwe	2.1	2.0	1.1	1.2	0.6	30%
Swaziland	2.3	2.1	1.1	1.9	0.3	40%
Zambia	2.4	2.5	0.6	0.0	0.6	0%
Namibia	2.7	2.3	2.3	2.5	0.0	0%
Lesotho	3.0	1.5	1.0	1.5	0.0	50%
Malawi	3.0	3.0	1.6	1.2	0.8	10%
Mozambique	3.0	3.0	0.8	0.6	0.4	0%
Tanzania	3.0	2.8	0.6	1.7	0.0	20%

* 0 = not important; 1 = important; 2 = very important; 3 = extremely important

[92] Before the 2001 Budget abolished rebates for training expenses, Zimbabwe refused to pay for training *outside* the country.

Table 23. *Evaluation of proposal for a training levy (average responses)**

	Oppose or favour a training levy?	Type of management preferred for training levy fund?		
		State managed	Jointly managed	Semi-autonomous body
	(% favouring)	(% yes)	(% yes)	(% yes)
Lesotho	100	0	50	50
Malawi	88	0	38	63
Mauritius	100	0	25	75
Mozambique	100	0	17	83
Namibia	100	0	25	75
Swaziland	86	17	17	67
Zambia	86	0	17	83

* These questions were not asked in Botswana, Zimbabwe, Tanzania and South Africa

Box 4.

Training Levies and the Asian NICs*

"Several East Asian economies have effectively used direct reimbursement of approved training expenses, funded out of payroll levies, to encourage firms to train their employees. Several schemes—such as those in Taiwan, China and Singapore—are flexible, demand-driven, and often accompanied by an information campaign and a program of technical assistance to smaller firms. The introduction of such a scheme in Taiwan, China, led to dramatic increases in the volume of training, which continued even after the program was terminated in the 1970s. Singapore uses a levy on wages of unskilled workers to upgrade skills through the Skills Development Fund, and the Fund's aggressive efforts—to raise awareness of training among firms to support development of company training plans, and to provide assistance through industry associations—have led to a steady rise in the incidence of training, especially amongst smaller firms. However, such schemes, when administered rigidly, can also create disincentives to train. In Korea, the requirement that firms give training lasting a minimum of six months or pay a fine, led many firms to pay the penalty rather than train to this standard. …

"Malaysia's Human Resource Development Fund is an example of a flexible, demand-driven training scheme. A payroll levy is used for partial reimbursement of approved training expenses. Depending on their training needs, firms can choose flexibly from among several programs: *(i)* approved training courses provided by registered external institutions, *(ii)* ad hoc in-plant or external training courses on a as-needed basis, and *(iii)* annual training programs. … In addition, the [Fund] provides firms with grants for developing training plans, organizes regional courses on training need assessments, and administers a variety of subsidized programs targeting small enterprises" (Harrold, Jayawickrama and Bhattasali 1996:93-94).

In Singapore, "the Training Voucher Scheme supports employers with training fees. This Scheme enabled the Skills Development Fund to reach more than 3,000 new companies in 1990, many of which had 50 or fewer employees. The Training Leave Scheme encourages companies to send their employees for training during office hours. It provides 100% funding of the training costs for approved programmes, up to a maximum of $20 per participant hour. In 1990, over 5,000 workers benefited from this Scheme. The success of the Skills Development Fund is due in part to the strategy of incremental implementation. Initially, efforts focused on creating awareness among employers, with ad hoc reimbursement of courses. The policy was then refined to target in-plant training, and reimbursement increased to 90% of costs as an additional incentive. Further modifications were made to encourage the development of corporate training programmes by paying grants in advance of expenses, thus reducing interest costs to firms" (Lall 1996 cited by Lall and Wignaraja 1998:76).

* newly industrializing countries

Utilities and Their Costs

Government policy affects the cost of both electricity and communication services in the region. For electricity, the tax rates (VAT plus excise taxes) vary between zero in Mauritius[93] and 24.5% in Zambia, with 14% being the typical as in South Africa.[94] In one case—Mauritius—the price of electricity for EPZ firms (i.e., mainly textile mills and clothing factories) is also subsidized by U.S. 1.6¢ per kWh;[95] and in other countries, inefficient monopolies rule and charge exorbitant prices. Hence, the cost of electricity per kWh runs from 2.7¢ in South Africa to 20.6¢ in Tanzania (Table 10). Though normally VAT should be refunded on exports, our fieldwork confirmed that refunds are either grossly late in coming or simply not obtained, precisely in the countries where electricity costs the most. In the worst case (Tanzania), the **VAT alone costs more** per kWh than the **entire per unit cost of electricity in South Africa.**

Levying such an onerous tax on top of an already exaggerated price is a big deterrent to investors, especially in countries desiring to revive their textile mills since these are energy intensive. According to the norm based on surveys in southern India in the late 1980s, ring spinning should consume 3.56 kWh per kilogram of an average 40s count yarn, without any wet processing such as dyeing or steaming (SITRA 1990: 3.8).[96] That amounts to 9.6¢/kg in South Africa, 18.2¢ in Zimbabwe and 73.3¢ in Tanzania. In Tanzania, these costs are so high as to endanger the viability of spinning there.[97] For example, a major spinner in Zimbabwe reported that electricity costs roughly 5% of its selling price. If located in Tanzania, the expense would be prohibitive at nearly 20% of the selling price, considering Tanzania's current electricity rates. An alternative way to calculate this is to compare the value of the electricity based on the norm for 40s combed undyed yarn to the product's price. A typical price for 40s/1 in Mauritius is currently $3.10/kg. Since electricity costs are virtually the same in Mauritius, Malawi and Zimbabwe, if that yarn were spun there, electricity would represent about 5.9%, but in Tanzania, 23.7% (Table 24). By either method, the results are similar. Thus, with their exorbitantly expensive electricity, Tanzania has made it extremely difficult for textile manufacturers to export and, indeed, survive.

[93] In October 2000, Mauritius removed the VAT on electricity. Previously, only EPZ firms were exempt.

[94] Near SADC, Kenya also charges EPZ firms zero VAT on electricity (Omondi 2001).

[95] The rate cited for Mauritius is for companies holding an Export Certificate. Others pay more than **double** that: 10.0¢ per kWh. "The deliberate attempt to keep prices at an artificially low level [in Mauritius] has not been without adverse implications.… It has nearly led the State Trading Corporation and the Central Electricity Board to bankruptcy.… The financial situation of the [board] had deteriorated mainly on account of cost increases which had not been matched with tariff increases…. For every unit of electricity sold, the [board] was losing 43 cents [of a rupee]" or 1.6¢ of a dollar (see Box 1) (Mauritius Ministry of Finance 2000:11, 15 and 16).

[96] Consumption varies by the yarn count, with heavier yarns consuming less power, though not in a linear relation.

[97] interview with Stefan Schmidt, managing director, Glendale Spinners, 18/10/2000

Table 24. *Cost of electricity to make 40s/1 combed yarn as a % of total price*

	%
South Africa	3.6
Mozambique	3.7
Swaziland	3.6
Botswana	3.7
Zambia	4.0
Namibia	5.1
Malawi	5.7
Zimbabwe	5.9
Mauritius	6.0
Lesotho	7.7
Tanzania	23.7

In the communication sector, some governments—e.g., in Mozambique, Malawi and Tanzania—have adopted retrograde policies legally banning the use of modern and very cheap technology for communication services such as Internet telephony and fax messaging unless done through the local telecommunications monopoly. Naturally, the monopolist does not care to offer a service menacing its revenue and, therefore, lobbies vehemently to keep control and protect its profits while persuading government to believe erroneously that suppressing this technology and forcing clients to pay exorbitant rates is in the national interest. Often the effort succeeds. For example, in Mozambique, the government

> insists on anachronistic legislation protecting the local telephone company's monopoly by prohibiting third parties from offering Internet telephony and Internet fax services. These services cost about 1% to 2% of the present charges for a normal telephone call or fax message, which permits a huge saving for companies aiming at the international market, a market that demands constant communication.[98] The present policy is also extremely expensive for the nation. For each two dollars that Telecomunicações de Moçambique charges for an international call, roughly half is paid out to overseas telephone companies, that is, ... [the central bank] shells out a dollar in foreign exchange, a dollar for a service now offered for a few pennies via the Internet (Coughlin 2001:23).

Can suppressing technology and paying 50 to 100 times more to do so really be in a nation's interest? Can attempts to prohibit companies, especially those targeting export markets, from using advanced technologies that will permit them to incur but trivial international communication costs encourage investors?

Financial Institutions and Credit Availability

Manufacturers' replies about whether they are constrained by a lack of short- or long-term credit are difficult to interpret because the answers may *(i)* indicate a scarcity of bank finance even for creditworthy firms or *(ii)* reflect the inaccurate opinion of a high-risk, uncreditworthy firm. Still, our survey does yield useful insights.

[98] Telecomunicações de Moçambique currently charges $2.07 per minute for calls to Europe and America whereas calls to the U.S. cost, at most 3.9¢ per minute and are sometimes free, fully financed by advertising, for example, via www.net2phone.com and www.go2call.com. To Europe, the cost is usually less than 7¢ per minute, including for faxes. Better yet, direct PC-to-PC communication is completely free for calls and faxes.

Both the survey responses and anecdotal information confirm that even pre-shipment finance for orders based on letters of credit are extremely difficult or plain impossible to get particularly in Zimbabwe, Malawi and Zambia and, to some extent, in Swaziland (Table 25). The implications can be dire. Orders are lost; and employees by the hundreds are fired. Consider the following:

> [In Malawi,] for those who need it, pre-shipment finance is also "impossible to get". For example, one factory got a trial order with confirmed letters of credit and eventually had to cancel the order because of the unavailability of back-to-back financing for letters of credit. Now the manager has a new order and irrevocable letter of credit from the same customer but, though the local bank said that, in principal, it could give credit against those, it insisted on "investigating the viability" of extending credit. At the time of the interview, a month and a half had lapsed with still no decision and the company had to postpone the promised date of delivery. The manager insisted that "if we have to cancel again, [my customer] will not even look at Malawi" again. He also informed us, "I got a trail order from [a large American buyer] and they've asked to visit the factory. I'm delaying because, if I can't get the financing, there is no point in asking them to come here" (Coughlin and Undenge 2001:20).

Moreover, whereas international subsidiaries can usually obtain foreign credit, companies owned by local entrepreneurs often cannot. As a result, the local banks' slow decision-making and timid policies toward industrial credit jeopardize, above all, these entrepreneurs, a strata that most governments would like to see grow. In contrast, very few multinational subsidiaries complained about constraints due to lack of capital.

Those same countries—Malawi, Zambia and Zimbabwe—plus Mozambique have the highest percentage of respondents that, reportedly, are extremely constrained by the lack of both short- and long-term credit. Usually about a quarter to a third of their respondents were in such straits (Table 25). Would they have been meritorious candidates for loans had they applied for such? Were the banks exceptionally conservative about industrial loans, demanding much collateral and high interest premiums for risks? Or, were they just short of capital? We do not know. The most likely answer contains elements of all of these considerations.[99]

One way to obviate the problems of high interest rates and exchange rate risks would be to allow firms that are exporting particularly outside the SADC region to borrow in foreign currency. Many foreign-owned firms do this to finance the local operations.

Though we did not conduct a systematic study of the region's financial institutions, we observed that various countries do not have industrial development banks to provide manufacturers long-term loans and equity, especially where commercial banks conservatively focus on short-term financing. Where absent, industrial development banks are needed to fill that gap; but, to be effective, they must do more than just sit on a static portfolio. They should be pro-active, investing and liquidating, investing and liquidating, to rotate their capital, identify and promote competent industrialists, and push industrialization forward.

[99] For an informative review of credit constraints in manufacturing enterprises in Africa, see Bigsten *et al.* (2000).

Table 25. *Credit constraints and availability (% average responses)*

	Number of respondents*	% of firms constrained by lack of:				Pre-shipment credit	
		Short-term credit		Long-term credit		Difficult or impossible to get? (% yes)	If unavailable, would it be useful? (% yes)
		Somewhat	Extremely	Somewhat	Extremely		
Botswana	6	0	0	0	0	0	n.a.
Lesotho	3	0	0	33	0	0	0
Mauritius	11	9	0	0	0	0	n.a.
Mozambique	5	40	20	40	20	0	n.a.
Tanzania	7	13	13	37	13	14	n.a.
South Africa	9	38	0	31	0	20	n.a.
Swaziland	7	0	**29**	0	**29**	**43**	—
Zimbabwe	20	15	**35**	11	**32**	**58**	—
Malawi	8	13	**25**	0	**25**	**75**	83
Zambia	8	11	**67**	11	**22**	**100**	100
Namibia	5	40	0	25	0	—	—

Note: dash = no response; n.a. = not applicable because pre-shipment credit is readily available to creditworthy exporters.
* to question about constraints due to lack of short-term credit. (In a few countries, one less respondent answered the question about long-term credit.

Arrangements under the SADC Trade Protocol: How Far an Advance?

Though the SADC Trade Protocol has pushed liberalization of trade within the region, the slow pace of liberalization and the protocol's restrictive rules of origin (including for EPZs within the region) hamper the region's textile and clothing industries. Still suffering from an inward-looking myopia, many countries are ever so cautious in opening up their markets even to trade within the region, a trade that would spur their manufacturers to specialize, achieve economies of scale, and improve their competitiveness in international markets. Of the non-SACU SADC Member States that signed the Trade Protocol, Mauritius, Zimbabwe, Malawi and Zambia completely abolished tariffs among themselves under COMESA as of 31 October 2000; but, their offers concerning the schedule for phasing out tariffs have been considerably backloaded.[100] These states plus Mozambique and Tanzania all urge a quicker elimination of tariffs on yarn, fabric and clothing within the entire region. The SACU countries, however, face intense lobbying from manufacturers and labour unions dreading competition and lost jobs and, hence, oppose an accelerated schedule.

The slow phase-out of tariffs by SACU on inputs for the textile and garment industries—with the SACU tariffs on fabrics being eliminated only in 2005—gives the sector a slow start in the process of regional industrial and trade rationalization so necessary to take full advantage of AGOA as well as the EU/ACP accord (Table 26).[101] Moreover, the offers by other Member States are often even slower. Without the elimination of **all** intra-SADC tariffs **now,** the potential volume of trade involved in *efficient* regional supply pipelines will be sharply reduced. Instead, inefficient pipelines will be protected thus reducing everyone's, including South Africa's, ability to compete aggressively in European and American markets.

Elimination of intra-SADC tariffs is a **precondition** for starting highly efficient and competitive strategic alliances involving spinners, weavers, garment producers, and large retail chain stores in the region in preparation for using these techniques in yet more competitive global markets (see "Strategic Alliances" on p. 81 and "Competitive Strategies" on p. 83). Moreover, the single-transformation privileges for least developed countries expire under AGOA in September 2004, merely three years from now; the Agreement on Textiles and Clothing eliminates quota restrictions; and AGOA itself is only in force till 2008. After that, tariff preferences will end; and a commercial onslaught from low-cost Asian producers will begin. If the region's industries are not robust and technologically and commercially savvy by then, they may wither or simply not survive. By 2008, the current incentives and insistent pressures for globalization will have lowered SADC's external tariffs, making them but small hurdles for Asian producers. In this context, delay now, even for two or three years, can be costly.

Table 26. *South African ad valorem duty rates for SADC (%)*

	2000	2001	2002	2003	2004	2005	2006	2007
Fibres	10	7	4	0	0	0	0	0
Yarns	13	10	7	4	0	0	0	0
Fabrics	18	15	12	9	5	0	0	0

Source: South African *Government Gazette*, 11 September 1998
Note: Under very restrictive quotas, the MMTZ countries may export duty-free.

[100] relegating most concessions toward the end of a phase-out period

[101] Under the new EU/South Africa trade agreement, SADC countries may buy inputs from South Africa and count these as originating inputs when exporting products to the E.U. under the EU/ACP agreement.

The SADC Trade Protocol imposes a double-transformation rule for products to be considered originating in the SADC region and, thus, eligible for duty rates lower than those for Most-Favoured-Nations (MFN). The rule is interpreted to mean that, to qualify for the SADC concession duties, yarn and fabric must be made from SADC-origin fibre, and clothing, from SADC-origin fabric. Moreover, pending further discussion in SADC, EPZ factories are deemed by most member states to be outside the joint customs territory and, hence, subject to MFN tariffs.

Two major exceptions exist to the double-transformation rule. The first applies only to the MMTZ countries: Mozambique, Malawi, Tanzania, and Zambia. Until October 2005, these countries may export fabric and clothing to SACU duty free if those products have undergone a *single* transformation. MMTZ countries should, therefore, be able to export products to SACU made from raw materials imported from outside the region. These exports, however, are restricted by tiny quotas for yarn and fabric (Table 27). The quota is nil for fabric made from filament yarn; that for yarn and fabric produced from man-made staple fibre is only 433 tonnes per year, enough to supply a garment factory with about 300 workers. Even the quota of 7,610 tonnes for cotton yarn and fabric is 7,610 tonnes only equals the consumption of two or three large garment factories employing a total of about 5,500 workers.[102] That is less than 5% of South Africa's clothing industry. Thus, the quotas for fabric are **trivial** in the context of the South African market and small when shared by four countries. The single transformation rule, therefore, applies, in practice, only to garments and other made-up textile products such as blankets, bed-sheets, and tenting, and then only in small amounts. SACU's concessions to the MMTZ countries reveal no real intention to encourage them to enhance their capacity to produce *fabric*. On the contrary, the underlying strategy seems, implicitly, to only weakly encourage their garment industries and, when the double-transformation rule applies fully, require them to buy SACU textiles, mostly from South Africa, when making garments for the region. The strategy is ever so myopic and far from revealing a global or even a regional vision. Nor is it in line with the objective of setting up efficient supply chains involving SADC's LDCs.

Contrary to the common impression, the double transformation rule itself is a grave hindrance to the development of the textile and clothing industries in the region. Given the notorious level of customs fraud and tariff evasion especially for clothing misreported as second-hand or donated goods, clothing manufacturers face ever tougher competition from imports since, to get full protection, the must use fabric made in the region, often an impossibility for man-made fibres for which a grave shortage exists and, even when possible, at a cost significantly higher than that paid by competing firms in Asia. The textile firms too face a dilemma. Since most sell primarily for regional consumption and the SADC member states seldom grant tariff rebates for the imported inputs used by indirect exporters, textile mills—unless integrated all the way to clothing or incorporated in export processing zones—are at a big disadvantage against imports when trying to sell to export-oriented clothing manufacturers. Thus, instead of having a burgeoning garments industry creating derivative demand for textiles, the garment industry's sales have, at best, grown slowly under the pressure of imports.

Both sides have a protectionist orientation, begrudgingly trading concessions instead of looking at regional integration as a way to improve efficiency to compete better in global

[102] The average weight of fabric produced in the region in 1999 was 209 grams per square metre; and the average consumption of fabric per garment is 1.45 square metres (see section above on The Pipeline) for an average of 303 grams per garment. The quota for *man-made* staple fibre fabric would be enough to make about 1.4 million garments per year, which is the output of **one factory** with about 300 employees, producing 20 garments per day per employee!

markets.[103] Moreover, outside SACU, the SADC countries have gone to the negotiation table hat in hand, not knowing how to extract larger concessions principally from South Africa, the largest single market in the region. This posture of weakness is not altogether necessary. Though "only 2.2% of SACU imports are sourced from non-SACU members", 7.5% of South Africa's exports are sold there; and, in 1998, Malawi, Mozambique, Zambia and Zimbabwe, all bought between 36% and 40% of their imports from SACU countries (Flatters 2001:27). Non-SACU SADC countries should understand that, by accepting tiny concessions from South Africa, concessions that are by far insufficient to build-up their industries significantly, they are thereby committing themselves to costly trade diversion (buying expensive South African goods instead of from cheaper international sources) and getting little in return. They need not assume a weak negotiating posture with SACU. Ironically, in this case, smallness is to their advantage.

> For a small country, i.e., one too small to have a significant impact on world markets …, the benefits of its own trade liberalization measures accrue entirely to itself. This simple fact stands in sharp contrast to a common myth of trade negotiation, i.e., that tariff reductions are concessions to one's trading partners. Perpetuation of this myth is arguably one of the largest costs of the multilateral trade liberalization exercises of the past several decades. By depicting and treating tariff reductions as 'concessions', they have become a massive source of disinformation to policy makers and observers….
>
> By bringing domestic prices closer in line with world costs and prices, [a small country] ensures a more productive and efficient use of its domestic resources (Flatters 2001:20).

Thus, if SACU persists in trying to defend its overwhelming trade imbalance with the rest of the SADC countries, the latter can openly consider stopping the trade diversion and consequent losses by drastically lowering their MFN tariffs on goods they import mostly from SACU, thereby making SACU goods compete on an *even footing* with those from *any* other sources inside or outside SADC.[104] A basis for more serious discussions between the parties could then be found. If the small economies in SADC agree to sacrifice through trade diversion by buying goods from SACU that can be bought more cheaply from alternative international sources, they must be assured that the agreement offers them significant dynamic gains through "economies of scale, increase[d] investment and higher total factor productivity growth from better access to technology and expertise", particularly in those few sectors (e.g., textiles and clothing) where they have a chance of being competitive (Tsikata 1999:33). And if SACU is unwilling to cede even that, a unified and tougher stance is warranted.

The SACU offer under the SADC Trade Protocol calls for duties to be imposed on *(i)* yarn, fabric and clothing imported from SADC countries, that are not covered by the quota for the MMTZ countries, and *(ii)* all such products imported from Mauritius and Zimbabwe. For products that meet the double-transformation rules of origin and are thus considered of SADC-origin, the duties are lower than the MFN duties and will be phased down to zero over the next four years (Table 26). Products made in SADC that do not meet the double-transformation rules are treated as if they are from outside SADC and must pay the higher MFN duties. These duties and rules of origin greatly restrict the ability of manufacturers in the region to use the competitively priced fabric and yarn they need to make garments for

[103] See also Annex 4, p. 130.

[104] "Trade diversion … arises when initial imports from non-members that were cheaper are replaced by more expensive member countries' imports. Of course, to the extent that a free trade arrangement does not force participating countries to commit to a common external tariff, trade diversion effects can be minimized. The country can unilaterally liberalize in order to obtain the least cost import" (Tsikata 1999:33).

SACU, the region's largest market, and to compete successfully against imports. A single stage transformation rule would better enable firms to compete and achieve economies of scale by displacing imports.[105]

Despite pleas from Zimbabwe and Mauritius, SACU has also, so far, refused to *(i)* waive the double-transformation rule for **yarn** made from man-made fibres produced in nil or insufficient quantities in the region and *(ii)* extend this exception to man-made fibre based **fabric** and **clothing** whenever the respective inputs are produced in nil or insufficient quantities in the region. This intransigence virtually blocks out such imports; and, correspondingly, the trade in textile fibres, yarn, fabric and clothing between SACU and Mauritius was 7.6 to 1 in favour of SACU in 1999 (Annex 1).

Table 27. *SACU quota offers to MMTZ countries, 12 February 2001*

	HS chapter				
	52 **Cotton and cotton-based yarn and fabric** (tonnes)	**55** **Man-made staple fibres; yarn and fabric made thereof** (tonnes)	**60** **Knitted or crocheted fabrics** (tonnes)	**61 and 62** **Articles of apparel and clothing accessories** (thousand units)	**63** **Other made-up textile articles; sets; worn clothing and textile articles; rags** (tonnes)
Malawi	1,110	43	200	8,565	565
Mozambique	3,600	0	0	4,200	170
Tanzania	1,200	0	0	500	300
Zambia	1,700	390	60	500	300

Source: SADC (2001:6)
Note: Under HS 52 and 55, the quotas apply to yarn and fabric, **not to fibre.**

Another possible exception or, better said, a loophole to the SACU restrictions is through the Botswana-Zimbabwe bilateral trade agreement. Accordingly, goods manufactured in one country may be imported into the other without quota or duty. To qualify, the value of labour and locally produced raw material must be 20% of the total manufacturing cost for clothing, and 25% of the total manufacturing cost for other products. Since Botswana is a member of SACU, once Zimbabwe origin products are imported there, they can easily find their way to other SACU countries without restriction. The local content rules are easy for garment manufacturers to satisfy since labour is generally 25% to 35% of a garment's cost. Yarn made from Zimbabwe cotton will meet the local content rules; but yarn with imported fibre most likely will not. Fabrics made from Zimbabwe cotton will meet the local content requirements, as will some fabric made from a blend of Zimbabwe cotton and imported man-made fibre. Fabrics made entirely from imported yarn will probably not meet the criterion for duty-free importation under the bilateral agreement. The bilateral accord appears to create a loophole that some Zimbabwe manufacturers may use though we only came across evidence of this in the case of one small Zimbabwean producer.

[105] We advocate the complete abolition of internal and external tariffs on inputs, equipment and spare parts used by textile and garment producers. Hence, except for clothing, the rules of origin would not apply and, then, only as a single transformation rule.

The Way Forward: Strategic, Institutional and Policy Options

Scope and Limitations for Regional Strategies to Increase Regional Inter-industry Linkages

The single strategy for the region that will have the greatest effect on the textile and clothing industry is what we have referred to as *regional is local*. The concept is a simple, basic principle on which most regional trade associations are founded. The consequences for SADC are far-reaching and require a fundamental change in the way member states view regional trade and their trading partners.

The goal of this strategy for the textile and clothing industry is to build competitive garment-supply chains. This strategy will do that by allowing each part of the textile and clothing supply chain do what it does best, where it is done best. As discussed in the section on "Strengths and Weaknesses by Country", no single country has the resources to perform competitively every part of the pipeline while processing for every possible market. Nor should they try. Rather, by abolishing tariffs on equipment, spares and inputs used by the textile and garment industries and by adopting the *regional-is-local* strategy for clothing, the countries in the region will specialize efficiently and achieve economies of scale and improved competitiveness for the whole supply chain.

Improving the competitiveness of the supply chain will help SADC capture a greater share of the export market. It will also lower the cost and raise the quality of garments sold to SADC consumers thus increasing everyone's welfare and, with the fall in costs and presumably prices, thereby selling more. To understand the full importance of increased sales, we need to understand the value structure of the garment-delivery pipeline. Estimates of the ratio between the factory- price and retail-price of garments range between 1:4 and 1:6. Even under the lower estimate, nearly 75% of the value-added in the pipeline is from wholesaling and retailing! Thus, an increase in the sale of garments in the region means enormous benefits to the economy, especially when arising from income and not mere substitution effects.[106] By lowering the cost of garments in the region, regional manufacturers will be more competitive in both regional and export markets and, thereby, achieve further economies of scale; regional retailers and wholesalers will sell more; regional consumers will pay less and get better garments; and the whole regional supply chain will grow and become more efficient.[107]

What are the strategies to implement the regional-is-local vision and to improve the regional garment-delivery pipeline? Private-sector firms will have to adjust and make

[106] This argument could be used to favour opening up the regional market to clothing imports. While this may be a long-term goal, the immediate strategy is to improve the regional garment-delivery pipeline and seize export opportunities. As the pipeline improves, it can be opened up to garments imported from outside the region and still retain a significant share of a larger, regional market.

[107] This is exactly what happened under NAFTA. Retail sales of garments throughout North America have increased, leading to creation of jobs in retailing and wholesale distribution. Rough estimates show that American households have an extra $1,300 to $2,000 per year of disposable income as a result of lower retail prices and higher incomes. U.S.-based retailers have expanded in both Canada and Mexico. Contrary to expectations, Canadian garment firms have actually increased production as they shifted to supplying niche markets where they can compete. Mexico is now the largest supplier of garments to the U.S. with a huge increase in jobs in that sector. U.S.-based textile mills have expanded production to supply Mexican garment manufacturers.

investments to effectuate the changes. The public sector will need to implement enabling strategies to facilitate these private-sector initiatives.

The most effective private-sector strategy for increasing regional co-operation and developing more competitive supply chains in the garment industry is the creation of **strategic alliances** among manufacturers and retailers. Strategic alliances enable all parts of the supply chain to work together as partners. This partnership lowers costs, risks, and delays while increasing the range and value of the products delivered. To build strategic alliances, the regional-is-local strategy is essential, as it will enable firms to set up alliances with little regard to national boundaries.

Strategic Alliances

Up until the last decade, most business in the apparel supply chain was conducted on an arm's-length, buyer-seller relationship. Garment manufacturers either created a line and tried to sell it to retailers or made products designed and ordered by the retailers. Fabric suppliers did the same with the garment manufacturers. Such relationships are still common, but they have a price and that price is time.

Starting in the 1980s, major players in the apparel-supply chain developed a concept known as Quick Response (QR) (Box 6, p. 83). The underlying concept is that the retailers and garment and fabric suppliers work together to create, produce and sell a line of products. Pilot studies in the late '80s and early '90s showed that *(i)* the time between the conception and sale of a product could be reduced by several months, *(ii)* large amounts of inventory could be squeezed out of the supply chain, *(iii)* all parties to the alliance would show increased profits, and *(iv)* the consumer would have a better choice of merchandise designed for their specific lifestyles and needs (Box 5). Quick Response is the set of business practices that form the basis of strategic alliances (Box 6).

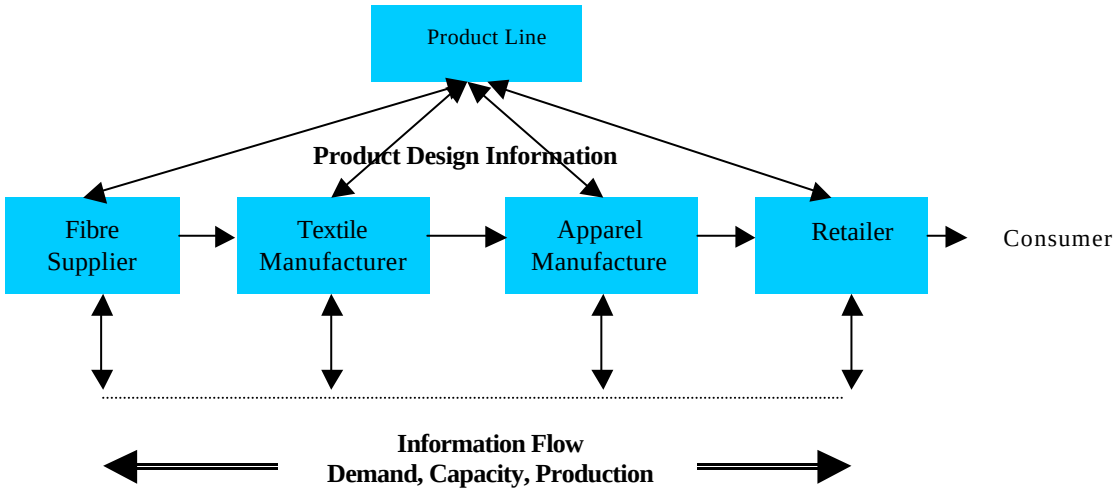


Figure 2. *A strategic alliance among retailers, textile and apparel manufacturers, and fibre suppliers*

Box 5.

Benefits from Quick Response and Strategic Alliances

Pilot studies in the early 1990s in the U.S. showed large benefits for all parties to the apparel supply chain when they implemented Quick Response programs and Strategic Alliances.

Table 28. *Benefits from quick-response and strategic-alliance programs*

	Fabric manufacturers	Apparel manufacturers	Retailers
Sales	50% increase	35% to 40% increase	35% to 40% increase
Return on sales	25% increase	70% increase	> 100% increase
Return on assets	45% increase	270% increase	85% increase
Inventory	25% lower	50% lower	30% lower

Source: Rubin (1996: 25) based on data in KSA (n.d.)

Working together to develop a product line means co-operating and sharing information from the conception of the line through to its sale to the consumer. Instead of the apparel manufacturer developing a line and then looking for customers and fabric suppliers, or an apparel merchant taking his design concept and looking for fabric and a CMT contractor, the line is developed jointly. Man-made fibre suppliers are involved as well since fibre performance is critical in a fabric's performance, which, in turn, is critical for the success of a garment line.

The co-operation centres around sharing information (Figure). The strategic-alliance partners share information about the product as it is being developed. As a result, they are aware from the beginning exactly what is required and can begin early the technical and developmental work necessary, rather than waiting for an order to arrive. The partners share information on the timing and projected volumes of retail sales and on capacity at each production stage. In the most advanced forms of such alliances, the partners agree on prices and profit sharing, creating in effect, a virtual corporation.

Since implementing the strategic alliance requires sharing information, the partners must have the information and efficient ways to share it. Having and sharing information requires good communications technology and data-processing systems to gather and process the information. The information systems must co-ordinate orders, capacity and material supplies and are referred to as Enterprise Resource Planning (ERP) systems. The communication technology required is electronic data interchange (EDI). EDI was originally implemented using specialized value-added networks but is now increasingly done over the Internet.

Putting a strategic alliance together requires investment in money and time plus a willingness to make radical changes in business practices. The potential benefits are huge and should motivate partners in the apparel-supply chain to co-operate. In fact, however, the majority of manufacturers in the United States were driven to make the leap into Quick Response and strategic alliances at the insistence of their retail customers. This makes sense as it is the retailers who feel the competitive pressure first, and the shift in economic power to the retailer has given them the ability to demand the changes from their suppliers (see p. 14).

The benefits from Quick Response based strategic alliances are clear. Moreover, as regional firms enter into the international marketplace, particularly the U.S. market, many of their customers will compel them to work as QR suppliers. Rather than waiting for this to happen, the regional suppliers should anticipate it and prepare to work this way. They should also see QR as a way to compete and should offer it pro-actively to customers.

Why not start now with the regional supply chains? In SADC, we have the advantage of having some sophisticated retailers, mainly based in South Africa, who can lead the way. Beginning regionally, the fibre, textile, clothing and retail industries can *(i)* learn how to work together, *(ii)* find products and supply chains where QR-based strategic alliances can bring big benefits, and *(iii)* work out the bugs in the new systems. Working within the region, the strategic-alliance partners can make mistakes and refine their procedures in a less demanding and risky environment.

To do this, the region must work as a unit and really act as if *regional is local*. Eliminating the barriers to trade in textiles and clothing in the region is imperative if we want to develop truly competitive garment-delivery pipelines.

Box 6.

Quick Response: The Modern Strategy for the Apparel Pipeline

Quick Response (QR) is the strategy being widely adopted in the consumer apparel industry, as well as other consumer-product industries. It was formulated in the 1980s and began to be widely adopted in the 1990s after pilot studies in the United States showed the benefits to all parts of the apparel supply chain. The strategy boils down to three things:

- strategic alliances among retailers, textile and apparel manufacturers, and fibre suppliers
- using consumer demand to *pull* products through the pipeline rather than pushing goods to the consumer
- tactics to move goods and information faster through the supply chain and, thereby, reduce inventories

The critical business processes and technology for implementing Quick Response are:

- electronic data interchange, which is increasingly done over the internet
- vendor managed inventory
- short-cycle manufacturing techniques
- advanced logistics technology including bar-coding of products and cartons

Competitive Strategies

Apparel-delivery pipelines compete on more than just cost. Four axes of competition are important:

- price
- quality
- response[108]
- product

[108] The idea of referring to this aspect of competition as 'response' rather than the more limited 'delivery' is due to Steve DuMont of DuMont and Associates (DuMont 1997:3)

A continuum of strategic positioning is possible, for example:

- low price/low quality/medium response/generic products
- rapid response/high price/medium quality/specific products
- high quality/slow response/medium price/moderately specific products

Market demands and manufacturing capabilities determine the strategies to pursue. A firm can choose more than one competitive strategy and have a different strategic positioning for each product group and even for different customers or distribution channels. Individual private-sector suppliers, in conjunction with their partners, will decide which strategies they can be successful in.

Governments cannot choose strategies for the industry. Their role will be to support the strategies that private firms in their jurisdiction choose. Private firms, in turn, will have to invest in equipment, information technology, training and modify their business practices so as to support the chosen strategies. It is important, therefore, to discuss what policies and private initiatives will support competitiveness in each of the competitive axes: price, quality, response and product.

Price Competition

Price is the cost to the purchaser. Developing a price-competitive pipeline means lowering costs all along the supply chain. Price competition is related to production cost since a manufacturer must charge a price that will ensure long-term profitability. Other factors contribute to the price seen by the purchaser, e.g., financing costs, supply inventory levels, the cost of unsaleable merchandise, other merchandising risks (Box 7), and the transportation costs between production steps and to the final purchaser.

Lowering production costs requires *(i)* increasing volume to gain economies of scale, *(ii)* lowering cost of inputs and increasing input usage efficiency, and *(iii)* specialization. Specialization is accomplished by choosing a product strategy (see section on Product Competition). It is possible, for example, to specialize in offering a wide range of products, or to specialize in a narrow range of specific products. In either case, the manufacturer must organize production, shipping, and purchasing systems to execute the chosen strategy as economically as possible.

The analysis of cost issues based on the field studies and presented in the section on Cost, Quality and Delivery shows that barriers to intra-regional trade in clothing and textile products impede the creation of pipelines using the most competitive suppliers. This interferes with the ability of a supply chain to use the most cost effective suppliers. Eliminating these barriers in line with the *regional-is-local* strategy also lowers costs by permitting increased specialization and volumes.

The SADC region has huge variations in labour cost. A low-price strategy normally means producing a garment in a country where the per unit labour cost for assembly is lowest.[109] This does not necessarily mean where the wages are lowest, as productivity counts.[110] Increasing productivity means training staff, using industrial engineering, and applying piece-rate pay systems. Governments wanting to support low-price strategies must consider eliminating any legal, regulatory or political barriers to piece-rate pay systems.

[109] Textile production is not as labour intensive as garment manufacturing; and competitiveness in textiles is much less sensitive to labour costs.

[110] see Table 9, p. 37

Box 7.

Merchandising Risk

Textile and garment manufacturing differs from many other industries in that a few raw materials can be processed into a huge number of end products, whereas other industries involve the assembly of many parts into a few end products. This characteristic results in the so-called *inverted pyramid* illustrated below:

A consequence of this inverted pyramid is the increased merchandising risk. As each production step is completed, the number of possible end products becomes smaller. Each successive conversion commits the supply chain to a certain and narrowing range of products. If this range of products does not include the ones the consumer ultimately purchases, the supply chain is stuck with product that cannot be sold. Most textile and garment processes are irreversible; and unsaleable products must be disposed of as waste or sold to jobbers at a huge discount.

The goal of an efficient supply chain is to keep material in the least differentiated state possible, consistent with the delivery-time requirements. A classic example of this problem is the case of yarn-dyed versus piece-dyed fabric (fabric dyed in the cloth). For yarn-dyed cloth, the fabric manufacturer must commit—before the fabric is woven—to delivering specific coloured fabrics. If the yarns are dyed in colours the customer does not order, the yarn may be wasted. On the other hand, the fabric manufacturer may not be able to wait for the customer to make the final decision on colour because of the long weaving production time. Dyeing the yarn before the customer selects the colours entails a merchandising risk to the fabric manufacturer.

Response Competition

Response is the time it takes a pipeline or one stage thereof to deliver finished product starting from the time an order is placed. As discussed in the section on Delivery, pipelines compete on both delivery speed and delivery reliability. The speed and reliability of the pipeline depends on that between each step in the pipeline, not just delivery time from the final manufacturer to the customer.

To improve the delivery performance of garment pipelines in the region, strategic alliance partnerships could *(i)* take advantage of the potential proximity of fabric and garment manufacturers and of garment manufacturers and retailers and *(ii)* implement Quick Response programs to reduce the length of the apparel merchandise calendar.

One of the weakest links in the garment-supply chain is the delivery of fabric to the garment manufacturer.[111] Having textile and garment manufacturers close to one another reduces the transit time between the two and, hence, shortens the total time to the retailer.

Proximity can also improve delivery time in two other ways. Closer proximity between the fabric and garment manufacturers can improve delivery performance by mitigating the effects of fabric production delays. If part of a fabric order is not ready on time, and the manufacturers are near each other, it will not be very difficult or costly to send *part* of the order as soon as it is ready. In many cases, if the garment manufacturer can get some of the fabric, he can start sewing immediately and avoid missing his shipment deadlines.

Physical proximity between a manufacturer and his customer can also reduce sample-approval time. For example, if garment manufacturers are near their source of fabric and yarn, particularly if these are dyed, the time to get approvals of the colours, fabric and yarn is

[111] In the field studies, the project team found that late fabric deliveries were among the most frequent reason garment manufacturers cited for late deliveries (see section on **Delivery** under **Cost, Quality and Delivery).**

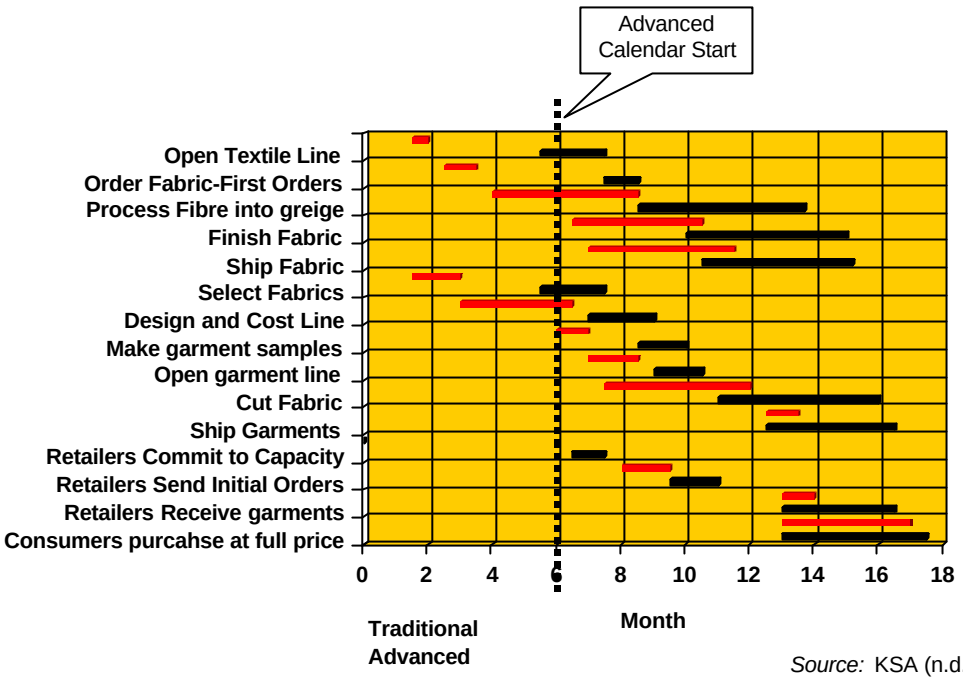
often substantially reduced. The approval process, particularly with new products, often involves much communication and retrials back and forth until an acceptable product is offered. If the supplier and customer are nearby, the time for each iteration can be reduced to hours, rather than the days it normally requires for a sample to be shipped and a response to be received. Regional integration among yarn, fabric, and garment manufacturers will thus allow SADC supply chains to significantly reduce order-cycle time and thus gain a big competitive advantage.

The advantage of proximity holds true for garment manufacturers and their retail customers as well. Exploiting this advantage will enable SADC garment manufacturers to offer very rapid response to their retail customers in SADC.

The most dramatic improvements in response time come from implementing an *advanced* merchandise calendar (see diagram, p. 87). A *merchandise calendar* is the time it takes to conceive a product line, produce it, deliver it, and begin to sell it to the consumer at full retail price. The traditional apparel merchandise calendar requires about ***one year*** between the time fabrics are conceived and apparel lines designed to the first shipments and retail consumer purchases. Studies conducted by Kurt Salmon Associates in the late ’80s and early ’90s showed that advanced supply-chain-management techniques could reduce this by at least ***four months*** (see diagram, p. 87). Among the most striking aspects of this is a reduction of five months in the lead-time for greige (unfinished) cloth production plus four months in that for finished fabric and garment production. These lead-time reductions mean a dramatic decrease in the amount of material that is in process in the supply chain and consequent decreases in costs and merchandising risk (Box 6).

In addition to reducing the time from conception to production of a product line, the advanced merchandising calendar extends the time over which shipments may be sent to the retailer. Traditionally, that is about one month, at the start of the season; under the advanced calendar, it is 3.5 months over the entire season. With the advanced calendar, at the beginning of the season, the retailer will hold about 30% of the stock he would have traditionally. This lowers inventory costs; but, more importantly, it allows the supply chain to delay style assortment choices and commitments and, thereby, allows it to observe consumer buying patterns and change styles, colours and quantities *during the season*. This ability to respond, within a season, to actual consumer demand reduces the retailer’s merchandising risk and increases sales. Furthermore, the full-price selling season is extended by nearly a month because, toward the end of the season, the retailer will have adapted and will still be offering precisely what the consumer is looking for.

The Apparel Merchandising Calendar: Traditional vs. Advanced



Source: KSA (n.d.:17)

The improvements in the merchandise calendar are accomplished primarily through Quick Response strategic alliances (Box 6, p. 83). By co-operating at all stages of product-line development and delivery, all the parties in the supply chain can reduce product development costs and delays, cut inventories, and provide a timelier and, therefore, higher value-added product to the consumer (Rubin 1996:25). The benefits in terms of lower costs and higher returns on sales and investment can be huge (Box 5, p. 82). Strategic alliances thus improve competitiveness on both response time and costs.

Developing strategic alliances and implementing Quick Response programs to reduce response time are private-sector strategies. To enable firms in the region to implement such alliance, the governments in the region need to eliminate the barriers to

- intra-regional trade in textiles and clothing,[112]
- free movement of people within the region, and
- free movement of capital within the region.

Regional governments should also provide the same investment and operating incentives for textile agencies as are now available for manufacturers. Moreover, to enable regional garment-delivery pipelines to compete more effectively on response, SADC member states need to

- eliminate customs inspections and other delays at the borders;
- improve regional road and rail services;

[112] This report recommends that all countries in the region eliminate **all** duties on imports of fibre, yarn and fabric from **whatever** origin, and that clothing be traded duty-free among all SADC countries under a single-transformation rule of origin.

- establish intra-regional maritime feeder services among continental ports and Mauritius;
- allow sealed containers to transit without delay or hindrance, and rely on the customs authorities in the country of *final destination* to verify the shipment; and
- promote the use of Walvis Bay as an alternative to Durban.

Quality Competition

Quality in competitive terms is subjective and is determined by the customer. When speaking about a scale of quality from low to high, we do not mean the level of non-conforming goods.[113] Rather, we are referring to the consumers' perception of the relative quality of one article versus another. Quality in this case refers to the design, level of embellishment, type of finishing and packaging, and overall degree of workmanship. Branding is an important part of quality as it affects consumer perceptions.

How do SADC manufacturers compete on quality? The firms making up a garment-delivery pipeline first need to understand what levels of quality are available in the market and how much the market is willing to pay for each. The competitive goal is to offer a slightly better quality than the customer usually pays for.

Quality competition then becomes a marketing issue. Garment pipelines require information about market needs. In the section on Capacity Constraints, we noted that both the high cost of international marketing and the international competition on quality were considered a very or extremely important constraint in 10 of the 11 countries. Inadequate contact with buyers was also considered a major constraint in six countries. This implies that manufacturers in the region have trouble getting this information.

Strategic alliances and Quick Response programs are an excellent way for them to get precise information on the quality level their customers seek because the strategic alliance partners agree on quality levels from the very beginning when the product line is conceived. The alternative is to gather information from current and potential customers, but contacting potential customers is expensive. Attendance at textile and apparel trade fairs is an efficient but expensive way to do this and is beyond the means of many local manufacturers. In all the countries surveyed, the manufacturers reported only limited government assistance in attending trade fairs. These policies need review particularly in light of the difficulties manufacturers apparently have in getting good marketing information.

Another problem that presents a barrier to regional pipelines competing on quality is the availability of yarn and fabric. The yarn and fabric used influence the consumer's perception of a garment's quality. If a manufacturer cannot get the right yarn and fabric, he most likely will not achieve the targeted quality. As discussed in the section on Raw Material Costs, the range of yarn and fabric available from regional manufacturers is limited. Barriers to importing yarn and fabric and using these materials to make garments for regional consumption must be eliminated if regional pipelines are going to be able to compete successfully on quality.

Product Competition

Competing on product means providing your customers with the products they are looking for. Some people in the garment industry feel that product competition is an aspect of quality competition. The authors, however, believe it useful to consider product competition separately, as it presents the manufacturer with four sets of strategic choices in deciding how to compete on product. He may:

[113] Quality as the level of non-conforming products is discussed in the section on Comparative advantages within SADC.

- specialize in a narrow range of products or provide a wide and more flexible manufacturing capability;
- make products to the customers' designs or provide products of his own design;
- produce many small orders of unique products or a few large orders of the same or similar products; and
- produce simple or complicated products.

The variety of markets in the textile and clothing sector is almost limitless. Some markets require larger volumes, more than 15,000 pieces[114] of a single style and colour with almost no product innovation. In this case, the manufacturer simply executes the customer's instructions. Some fashion markets have order volumes in excess of 15,000 pieces and require extensive design and development work. Markets with smaller orders—i.e., less than 15,000 pieces of a single style and colour—also exist, some simply executing customers' designs and others requiring the manufacturer to do the design and product development.

A single manufacturer can pursue more than strategy. For example, some manufacturers dedicate some of their production to large runs of simple products done according to the customers' design and the rest to short runs of unique products of their own design.

Each product strategy implies different production set-ups and a variety of upstream and downstream linkages and requires a choice among a set of manufacturing and management systems. A manufacturer adopting the strategy of producing large orders of a few customer-designed garments will have inflexible, but very efficient production lines. The customer service and planning process will be geared towards dealing with a few large orders that require strict adherence to customer specifications. Pre-production activities, such as sample approvals, will have to be very well coordinated with the customer. By contrast, a garment manufacturer that produces his own designs will need good facilities for design and product development and strong integration between marketing and product development but may have less pressure to co-ordinate pre-production activities with the customer.

The choice of product strategy may also affect the type of equipment a manufacturer installs. Textile manufacturers generally are far more limited in their choice of products to make once equipment has been installed than garment manufacturers. For example, a dye house that has only atmospheric dye ranges cannot dye polyester fibres. A dyer may choose to install *(i)* many small dye ranges to produce small quantities of many different colours or *(ii)* a few large dye ranges to produce large quantities of the same colour. The choices can be complicated and require the manufacturer to have a clearly defined product strategy.

Choosing a product competition strategy is part of the strategic planning process that all firms need to undertake, however formally or informally. Individual firms in the private sector will do the choosing. The public sector may, however, have a role in facilitating these firms' choices.

As with quality competition, understanding what the market is looking for is a key element in choosing a product strategy. In many SADC countries, manufacturers have much trouble finding customers and identifying what they want. A discussed in the section on Quality Competition, governments can help manufacturers in the textile and clothing industry to overcome this barrier.

[114] No precise definition exists for a *large* order. For this discussion, a large order is one that uses at least a container of fabric. A 20-foot container will hold about 50,000 metres of cloth. Assuming an order consists of two-colours of the same style, at 1.5 metres per garment, a *large* order for a single style and colour would be at least 15,000 pieces. At 15 garments per operator per day, the 15,000 pieces would require a factory of 100 people 10 days to complete.

Product strategy is also vital in developing strategic alliances. All partners in a strategic alliance participate in product development. The alliance itself must choose a product strategy. This can be complicated since it requires agreement among several firms. It is easier to create alliances among firms with clear product strategies that are consistent with the needs of the alliance to serve particular markets.

In summary, private-sector firms will choose how to position themselves strategically. The textile and clothing industries offer an enormous number of choices with ample room for firms to compete in diverse ways. The goal of each firm is to find a competitive garment-delivery pipeline in which it can add value, profitably. Regional co-operation will widen the available choices and, thus, increase the scope and size of the textile and clothing industry in SADC. The most important thing governments can do is to adopt the *regional-is-local* policy, and eliminate the barriers to regional trade in textiles and garments and to the free movement of people and capital in SADC. Governments can also assist regional garment-delivery pipelines by providing financial support to identify markets and their needs.

Table 29. *Private and public sector strategies to improve the regional garment-supply chain*

Private-Sector Strategies	Public-Sector Strategies
Implement strategic-alliance partnerships.	Remove tariff and non-tariff barriers to regional trade at all steps of the supply chain. Remove import barriers to fibre, yarn, and fabric not produced in the region. Implement single transformation to confer SADC origin for products made from raw materials not available in the region. Adopt the *regional-is-local* policy.
Identify markets and their precise needs in terms of product, quality, response, and price.	Provide financial support for regional firms to attend trade fairs and do market research.
Select competitiveness strategies and implement necessary changes in business and manufacturing processes and equipment.	Publicize opportunities for investment in the region in textile and clothing production, *including* cross-border opportunities.
Develop and implement regional inter-industry linkage standards to support the use of new logistics and computer and communications technology using the textile and clothing industry as a pilot.	Provide facilitation and the proper legal framework for the implementation of regional inter-industry linkage standards for EDI, product labelling, and carton labelling standards that conform to international protocols (see section on **Logistics).**
Improve staff skills through regular formal, training programs.	Provide financial support and a framework for regional training.
Implement ISO 9000 and improved quality-control procedures.	Eliminate barriers to the free movement of people within the region.
Implement Quick-Response technologies	Eliminate barriers to the free movement of capital within the region.
	Privatize the remaining publicly-owned textile and garment factories. Use the privatization process to install managers with skills in both production and marketing.
Implement industrial engineering programs to reduce the time and cost to produce garments.	Permit piece-rate payments, with guarantees of minimum wage.

Supply Potential of the SADC Textile and Clothing Industries

Regional manufacturers must understand the markets they face. Markets differ in their requirements for price, response time, quality, and product; and manufacturers must choose strategies that will enable them to compete successfully in them. SADC countries have different competitive advantages and, as a result, differ in their ability to meet the requirements of specific strategies. The most competitive pipelines, therefore, may have production and product development done in more than one country. To facilitate the building of such

pipelines, the region's clothing and textile industries must be integrated; and, to enable this integration, restrictions on intra-SADC trade in textiles and clothing must be eliminated.

The region has the potential to expand production in yarn, fabric, and garments. The existing spare capacity in yarn and fabric production facilities, however, is neither sufficient to meet current demand nor to take advantage of the large export opportunities under AGOA. As a result, the region urgently needs to produce more yarn and fabric.

Markets

To successfully exploit regional and international market opportunities in the textile and clothing sectors, these firms will have to understand the markets' requirements and adopt an appropriate strategic positioning. It will be helpful, therefore, to analyse some of the potential markets, the strategic positioning they most likely require, and to identify some potential regional supply chains that can serve these markets.

Policy makers and private-sector managers must understand that markets for textiles and clothing, even the regional and local ones, are complex and multi-faceted. If we look at the regional market, we can identify several distribution channels,[115] each requiring a different strategy:

Formal-modern
- Niche markets
- Mass markets

Formal-traditional
- Niche markets
- Mass markets

Informal markets

The *formal market* is defined as the market in which all business transactions are recorded and reported; and most of the parties are limited liability companies. *Informal* markets are those in which many transactions are done in cash, without formal business records and limited consistent reporting to authorities of business results. In the informal market, many of the entities will be individuals or sole proprietorships rather than limited liability companies.

Mass markets are those with a limited number of seasons per year, with replenishment shipments within a season, and with more than 25% of the product line being *basics*, i.e., styles and products that vary little from year to year, even in some cases season-to-season. *Niche markets* are those with frequent style changes, less than 25% of the products are basics, and replenishment shipments are the exception rather than the rule.

The *traditional* market is one in which business is conducted more or less as it has been for the last hundred years. Manufacturers create products that they go and sell to wholesalers who in turn sell and distribute them to retailers. In some cases, the wholesaler or retailer creates the product and subcontracts its production to a manufacturer, who then produces it to order. The *modern* market is a more sophisticated business arrangement in which the retailers, wholesalers and manufacturers are partners in developing and delivering products to the consumer. These are the markets that have already implemented or are moving towards Quick Response.

[115] The markets discussed are consumer markets. There are very important institutional markets, such as military and police uniforms. These markets, however, are complicated by local procurement programs and specific tendering procedures. It is, therefore, almost impossible to make the kind of generalizations about these markets that we are making in this section.

In some cases, part of a retailer's product line will be handled with traditional business arrangements, and part with modern ones, just as part of a retailer's product line may have the characteristics of a niche market, and other parts those of a mass market.

Although it is impossible to give hard and fast rules about which strategies each type of market requires, and with the understanding these are generalizations, we can suggest some common-sense guidelines (Table 30). Looking at the international markets, we would see a similar structure and potential strategic requirements. The main difference is that an informal, international market does not really exist, with the possible exception of neighbouring African countries.

Table 30. *Potential strategies for different markets*

Market Segment	Potential Strategies
Informal	▪ Low price ▪ Slow response ▪ Low quality ▪ Range from generic to specific products ▪ Small production runs
Formal Traditional Niche	▪ Higher price ▪ Slow to medium response ▪ High quality ▪ Very product specific ▪ Small production runs
Formal Traditional Mass	▪ Low price ▪ Medium to rapid response ▪ Medium quality ▪ Generic to moderately product specific ▪ Medium to large production runs
Formal Modern Niche	▪ High price ▪ Rapid response ▪ High quality ▪ Very product specific ▪ Small to medium production runs
Formal Modern Mass	▪ Low price ▪ Very rapid response ▪ Medium quality ▪ Generic to moderately specific products ▪ Large production runs

Possible Regional Pipelines

Comparison of the potential strategies with the strengths and weaknesses of individual countries in the region (see section on Strengths and Weaknesses by Country) reveals possible regional supply chains for each market. This analysis does not mean that manufacturers in each country are limited to the market segments suggested, nor that manufacturers in other countries cannot serve those segments (Table 31). The purpose of this analysis is to show *possible* regionally integrated supply chains that appear to have a competitive advantage. The point is that the region can compete and that regional integration is one of the keys to realising this potential.

Informal Markets

The informal markets are of unknown size since few records are kept and statistics are unavailable. Products sold in this market are not complex, so the technical production requirements are modest, and there is no need for sophisticated design and product-development facilities.[116] This market provides many entry-level opportunities for start-up firms and small and medium enterprises.

The key to exploiting this market is knowing exactly what the consumers in each area are looking for. Wholesalers and distributors are the best source of this information. Though small shops, often in remote areas, sell many garments in this market, the wholesalers are often more accessible. They know exactly what consumers buy and probably have the most information about what consumers want but cannot get. These markets present excellent opportunities to implement strategic alliances between the garment manufacturers and the wholesalers. These alliances would be on a small, perhaps even informal scale. The wholesalers would gain much by selling more garment in the areas they serve; but they lack production facilities.

This market is very price sensitive and, in many cases, would be best served with imported fabric. It will be up to the regional fabric manufacturers to identify specific niches in which they can serve these markets competitively.

Despite the lack of data, this market should not be ignored. In fact, it is worthy of focused research. Identifying niches in this market is a very effective way national governments can assist local manufacturers, particularly small and medium enterprises.

Formal Traditional Niche Markets

The defining characteristic of *formal traditional niche* markets is the small size of runs of unique products. It tends to be very sensitive to quality though customers accept higher prices. Good, innovative designs based on a strong understanding of the niche are essential. Garment manufacturers from nearly all countries can compete in this market because response and price requirements are limited. Fabric requirements are very specific and demand high quality on short runs. This points toward either using imported fabric or fabric finished in countries with better finishing facilities like Mauritius and, especially, South Africa. The yarn and greige fabric could be made by any fabric manufacturer in the region since rapid response is not required.

Mauritius and South Africa have the best facilities for developing products and providing designs for this market.

Formal Traditional Mass Markets

The *formal-traditional-mass* market is looking for price. Fabric needs to come from average quality, cost-effective producers as might be found in Zambia and Zimbabwe. Lesotho is an emerging moderate cost fabric supplier that, with the proper investment, has the potential to supply this market. Because of price sensitivity, the market may need to use imported fabric in the short to medium term. Response and quality requirements are not severe, so price will be the main criterion for choosing fabric. Garment production should be done in the low-cost countries. For the U.S. market in particular, this would provide opportunities for garment production in the low-cost LDCs such as Lesotho and the MMTZ countries as they can use imported fabric, and fabric from Zimbabwe until September 2004.

[116] A commonly discussed example of this market is school uniforms. Informal markets are often targets for used clothing and smuggled imports.

Formal Modern Niche Markets

The key difference between the *formal-**modern**-niche* market and the *formal **traditional** niche* market is the need for more rapid response and the possibility of larger production runs. The requirement for more rapid response means fabric should be finished closer to the garment manufacturer. This plus the lack of price sensitivity point to fabric finishing in South Africa and Mauritius with garment manufacturing being done in the higher cost countries closest to the fabric finishers such as Botswana, South Africa, Swaziland and Mauritius.

Formal Modern Mass Markets

Formal modern mass markets require low price, very rapid response and more sophisticated business systems. Fabric should be finished close to the garment manufacturer. Low price requirements and large runs point to garments being manufactured in either the lowest cost countries, such as Malawi, or higher cost countries capable of high productivity. The latter requires well-run plants with sophisticated systems and piece-rate pay such as in Mauritius. Namibia is a potential emerging supplier. South Africa, Swaziland, and Lesotho have restrictions on or discourage the use of piece-rate pay systems. This limits the ability of their manufacturers to produce garments for this market.

None of these markets are static; nor are the conditions in each countries. As the textile and clothing industries evolve in the region, their ability to serve the different markets will too. Furthermore, it is private-sector firms, not countries, that will compete in these markets. As a result, individual firms, either by finding specific market opportunities or by implementing better business and production systems, can become competitive in markets despite the general conditions in their country.

Table 31. *Potential regional pipelines for different market segments*

Market segment	Greige yarn and fabric production	Fabric finishing	Garment production	Design and product development
Informal	All SADC countries Imported	All SADC Imported	All SADC	All SADC countries
Formal-Traditional-Niche	Zambia Zimbabwe* Lesotho Swaziland Imported	South Africa Mauritius Imported	All	-Mauritius -South Africa -Customer designs
Formal-Traditional-Mass	Zimbabwe Zambia Lesotho Swaziland	Zimbabwe Zambia Lesotho Swaziland	Lesotho Malawi Mozambique Tanzania Zimbabwe Zambia	-Customer designs -Minimal product development work
Formal-Modern-Niche	Zambia Zimbabwe Lesotho Swaziland Imported	South Africa Mauritius Imported	South Africa Mauritius Botswana Swaziland	-Mauritius -South Africa -Customer designs
Formal-Modern-Mass	Zimbabwe Zambia Lesotho Swaziland	Zimbabwe Zambia Lesotho	Botswana Mauritius	-Customer designs -Joint product development

* Zimbabwe is not currently AGOA-eligible and thus cannot be source for either garments or for yarn and fabric made in into garments in Botswana, Namibia, South Africa, and Mauritius for duty-free entry into the U.S. market. Zimbabwe may currently supply yarn and fabric to the AGOA-eligible LDCs in the region, i.e., Zambia, Lesotho, Swaziland, Mozambique, Tanzania, and Malawi for making duty-free garments for the U.S. market.

Private-sector firms, therefore, might develop important and competitive regional garment delivery pipelines for both regional and international markets. The only serious barriers are the tariffs and other restrictions on trade in textiles and clothing among the countries in the region. Time is short as many deadlines loom in the near horizon. The Agreement on Textiles and Clothing calls for all import quotas to be eliminated by 2005, which will erode an important competitive advantage for the region. The derogation under AGOA permitting LDCs to source fabric from anywhere in the world expires in September 2004. In 2008, both the ACP agreement and AGOA will expire. It is critical for SADC member states to act now, adopt the *regional-is-local* philosophy, and unleash the region's potential to be a major international supplier of textiles and clothing.

Supply Potential for Textile and Clothing in the Region

The potential for increasing the supply of textiles and clothing is mixed. There is a shortage of man-made fibre and fabric of all types,[117] but the region produced 155,000 tonnes of cotton in excess of consumption in 1999. Data from 1996 to 1999 show that fibre, textile and apparel imports from outside SADC equalled 90% of the total imports of those products. What then are the prospects for producing more textiles and garments in the region?

The most important issue for increasing production is the huge shortfall in textile production. The supply of fabric and yarn must be increased if the region is going to develop competitive garment supply chains. Without such an increase, SADC will be constrained in its effort to penetrate the U.S. market since, after 2004, AGOA requires that all countries use yarn and fabric produced in the U.S. or AGOA-eligible countries.

[117] except nylon filament yarn, which constitutes about 1% of the total fibre consumption in the region

In the long term, production shortfalls can be overcome by investing in new capacity. Such investment will most likely take place in those countries that have the comparative advantages appropriate for each production stage (Table 17). New production facilities have the advantages of using modern technology, which means they will be more efficient and produce better products, and will be able to produce what the market is looking for.

Delay is the problem with new capacity. For garment manufacturing, this is not serious as it takes about four months to start a garment plant, from the time the factory shell is ready. Installing textile mills takes much longer: six to eight months for spinning and a year or more for weaving and fabric finishing. Due to these delays, it is important to look at increasing capacity at existing facilities and restarting idle ones.

The current production and capacity utilization figures (see sections on "The Pipeline" and "Capacity") reveal that the region has the capacity to increase textile and garment production, but not enough to cover the shortfall in current demand. In 1999, the shortfall in woven apparel fabric production was 307 million m²; and the potential increase is about 58% of that (Table 32). The remainder must come from imports or further increases in regional production achieved by reviving idle plants or building new facilities. This does not take into consideration the potential for increasing exports under AGOA or Lomé/Cotonou.

Increasing textile production will not solve, by itself, the region's shortfall in fabric. Garments and textiles may be made in different countries. Intra-SADC restrictions on trade in fabric and yarn—such as duties and quotas—must be eliminated in order for the garment manufactures to use the region's increased production of textiles in competitive supply pipelines. The specific changes to the SADC Trade Protocol the authors believe will be most effective for the development of competitive regional supply pipelines are discussed in the **Recommendations.**

Table 32. *Potential production increase for yarn, fabric and garments (currently operating plants)*

	Existing production (1999)	Estimated potential capacity increase	Estimated potential production increase
Yarn	225,000 tonnes	52%	117,000 tonnes
Woven apparel fabric	345 million m²	52%	179.4 million m²
Garments	780 million units (1,130 million SMEs)	30%	234 million units (340 million SMEs)

Source: see sections on The Pipeline and Capacity
Note: SME = square metre equivalents

Although AGOA provides direct incentives for increasing exports of garments to the U.S., the main policy goal is the development of an African textile industry. In a speech sponsored by MEPZA (Mauritius Export Processing Zone Association) on 24 May 2000, Peter Craig, the Trade Advisor to the Mauritian Embassy in Washington, reported that, in 1999, African exports to the United States, using African origin yarn totalled 77 million square metre equivalents (SMEs). Using the average weight of fabric produced in SADC in 1999 of 181 grams per square metre,[118] the total production of African yarn in 1999 for use in garments exported to the U.S. was about 14,000 tonnes.[119] If we consider this as the current capacity to produce export-quality yarn in Africa, the shortfall in African yarn production for the AGOA quota year 2000/2001 is 30,600 tonnes.[120] By the quota year 2004/2005, when all

[118] See note to Annex 1.
[119] For comparison, SADC manufacturers produced a total of 225,000 tonnes of yarn in 1999.
[120] This takes into account the yarn waste in weaving, of about 7.5%.

garments shipped duty-free under AGOA must be made from African or U.S.-origin yarn and fabric, the shortfall will be nearly 64,000 tonnes or **4.5 times** what was **exported in 1999,** this assuming no growth at all in U.S. apparel imports. If the growth in U.S. apparel imports is 6.4%,[121] the shortfall will be 86,000 tonnes or six times 1999's exports (Table 33).

Table 33. *Estimated shortfall in African yarn and fabric production for making AGOA-eligible garments*

Quota year (Oct. 1 to Sept. 30)	**No growth in U.S. apparel imports**		**U.S. apparel imports grow at historic rates (6.4%)**	
	Yarn shortfall (tonnes '000)	**Fabric shortfall** (million m²)	**Yarn shortfall** (tonnes '000)	**Fabric shortfall** (million m²)
2000/2001	30.6	169.5	30.6	169.5
2001/2002	38.9	215.5	42.3	234.1
2002/2003	47.3	261.5	55.3	305.9
2003/2004	55.6	307.5	69.7	385.6
2004/2005	63.9	353.6	85.7	473.8
2005/2006	72.3	399.6	103.6	571.4
2006/2007	80.6	445.6	122.9	679.1
2007/2008	90.1	498.2	146.2	808.0

Source: Estimated from tables in Annex 2.
Note: Grey highlighting indicates the period when **all** eligible sub-African countries must use African (or U.S.) origin yarn and fabric for garments to qualify for duty-free entry under AGOA.

If we just bok at the AGOA requirements, it appears SADC could increase production to cover the yarn requirements through most of the eight years of AGOA (Table 33). In the more likely case that U.S. imports continue to grow at least at historical rates, this additional capacity will just suffice to meet the quota allowances through 2005/2006, at which time all yarn and fabric must be of African origin. But this assumes that all the increase in *yarn* production is used to make fabric and garments for the U.S. market. For *fabric and garments*, however, this is not the case; and, without substantial new capacity, SADC will only be able to avail itself of a portion of the quota.[122]

Two assumptions need to be pointed out. The first assumption is that the potential increase in capacity is really achievable. No manufacturer achieves 100% capacity utilization for any extended period. For garment manufacturers, the calculated capacity increase is based on the factories working a sustained 60 hours per week, which is not legally possible in countries like Mozambique, and is not sustainable in all firms. Increasing textile production, in most cases, means increased investment, and it is unclear if this can happen at all textile firms with unused capacity.[123] Manufactures in both industries included increased productivity estimates as a source of potential production increases. Increasing productivity assumes better staff and supervisor training and better systems of management and control. Achieving this will require investment, training and technical resources and managers' commitment, none of

[121] U.S. apparel imports, in dollars, adjusted for inflation grew by an average of 6.4%, on and annual basis, from 1990 to 2000 (calculated from data obtained from the U.S. International Trade Commission Web site, http://dataweb.usitc.gov, accessed on 10 July 2001.)

[122] This assumes, of course, that SADC countries will capture all of the increased exports to the U.S. under AGOA, which is unlikely. It is more likely that SADC will capture a large share, given that the three largest exporters to the U.S. from Africa are all SADC countries. However, two non-SADC countries, Madagascar and Kenya, are increasing exports to the U.S. very quickly and show heavy investment activity in textiles and clothing.

[123] The field survey showed that lack of capital was a very important constraint on capacity utilization in eight out of 11 countries (chart on page 29).

which is assured. Despite all these caveats, however, even if only half the increase can be obtained, it is clear that substantial capacity increases are possible.

The second assumption is that there will be a demand for the increased production. For textile manufacturers, in particular, this may be a faulty assumption, since the range of products each manufacturer can produce is limited. There is also the problem of outmoded equipment, which may render some of the increased production unsuitable for export markets, or too costly. A related problem is that the increase in available capacity may not be balanced. An increase in the capacity of a fabric delivery pipeline will not occur if there is not a concurrent increase in all production stages.[124] A more thorough survey of the production capabilities of textile firms would be needed, to determine the extent to which this assumption is correct. The information from such a survey would be useful for the investment promotion agencies that will try to attract the investors needed in most cases to realize the full production potential of these firms.

These potential increases in yarn, fabric and garment production are not, however, all in the same countries. South Africa, of course, dominates the region in both current production and potential increase. South Africa's potential increase in *textile* production is 93% of the total and only 42% of the total additional *garment* capacity. On this basis alone it is clear that trade among SADC countries will be necessary for the region to avail itself of these productions increases.

Looking at cotton production, the 155,000 tonnes in excess of consumption is sufficient to meet the short-term potential for increasing yarn production, even if all the new yarn were made from cotton and we subtract the 10% waste of converting cotton to yarn. Cotton accounts for about 63% of the fibre used for spinning in the region (TIMSAA 2000: paragraph 4). If this proportion remains the same, as it has for many years (Jafta and Jeetah 2001:38), even with the optimistic estimates of increased yarn production we have used, the increased consumption of cotton for spinning would be 74,000 tonnes or half the region's excess cotton production. On the other hand, there is currently a shortage of man-made fibre produced in the region. If any portion of the increased yarn production uses man-made fibres, that will necessitate increased production from South African fibre manufacturers or an increase in imports. Man-made fibre production is one of the most capital intensive parts of the garment supply chain; and low international prices, due to global excess capacity, might make it difficult to attract investment for increasing South African capacity (Jafta and Jeetah 2001:39). As a result, third-country imports of fibre, yarn and fabric must and will be an important source of increased use of man-made fibre in the region.

What of the regional market for clothing? Current data on textile and garment imports for some countries in the region is difficult to get. The data that is available, however, indicate that most countries get most of their imports from outside SADC. Seventy-nine percent of clothing and 93% of textiles and fibre imported by SADC countries comes from *outside* the region (Table 34). Thus, the region's manufacturers supply little of the regional trade.

A big reason for the low level of intra-SADC trade is the shortfall in fabric production. To capture more of the regional trade, yarn and fabric capacity must increase. This need combined with the fact that AGOA-oriented exports alone could take up most of the currently unused capacity in fabric production is a further argument for developing new capacity for textile production in the region and for lifting the intra-SADC barriers in trade on fabric and yarn.

[124] The capacity utilization figures for textiles assume the same utilization rates for spinning, weaving and fabric finishing.

Table 34. *Textile and clothing imports into SADC ($ '000)*

Country and year for which data is presented	HS chapters 50-60			HS chapters 61-63		
	World total	Non-SADC	Non-SADC (%)	World total	Non-SADC	Non-SADC (%)
Mauritius (1999)	446,963	434,620	97	19,029	18,510	97
Mozambique (year-??)	16,955	15,357	92	21,167	17,359	82
SACU (1996)	634,704	591,694	93	222,527	173,096	78
Tanzania 1999	19,481	18,843	97	37,316	36,605	98
Zambia (1997)	22,496	16,022	71	25,646	18,196	71
Zimbabwe (1999)	88,621	63,582	72	12,525	3,728	30
Total	**1,229,220**	**1,140,118**	**93**	**338,507**	**267,494**	**79**

Sources: Mauritius: unpublished data from the Central Statistics Office; other countries: offers tabled by individual SADC countries to the SADC Trade Protocol Trade Negotiating Forum as furnished by the SADC Secretariat

Enabling Environment: Issues Specific to the Textile and Clothing Industries

Certain aspects of building an enabling environment for textile and clothing manufacturers were discussed in the section "Policies, Regulatory Framework, and Institutional and Macroeconomic Environment" (p. 50); and others comprise a well known litany, e.g., the need for a stable macroeconomic and political environment, trade liberalization, privatization of inefficient government corporations, and faster and simplified bureaucratic procedures.[125] We will not discuss these here. Rather, we will focus on a few additional issues specific to the textile and clothing industries in the region:

- information for efficient purchasing, marketing, investment promotion, and technology diffusion;
- regional logistical standards;
- links between textile mills and small garment producers and between large and small garment producers;
- regional and international investment promotion especially to create supply pipelines; and
- certification of AGOA visa systems.

Information

For many manufacturers in the region, information about purchasing, marketing, investment possibilities, and technology is hard and expensive to access. Many are still wedded to the telephone and fax machine and do not use the Internet even for e-mail, much less to search for information or advertise their products. As a result, they sometimes buy overpriced materials and engage intermediaries or sales agents that prove both costly and unreliable.

During our fieldwork, many manufacturers, especially locally oriented factories with less than 500 employees, revealed little international marketing experience and readily acknowledged that they urgently need advice and information about how to cut costs for materials and penetrate the European and American markets. Mozambique is an extreme case: each of the six export-oriented garment producers has only one international customer and, hence, has learned little about global purchasing and marketing (Coughlin 2001:30). In one factory, that is not a problem because its mother company, a multinational corporation,

[125] See, for example, Morriset (2000).

handles both purchasing and marketing. In other countries, protectionism has kept firms ignorant of global marketing techniques. If, for decades, they sold exclusively to the local market, even firms with 500 or so employees were sometimes perplexed about how to gain international customers though they usually did know how to search and identify reliable and reasonably priced international suppliers. Manufacturers ignorant about global marketing techniques and about how and where to seek such information were more prevalent in countries without the presence of established textile agents representing big international buyers as exist in Mauritius, South Africa and Zimbabwe. Such manufacturers, including most small- and medium-size enterprises, desperately need information about *(i)* major markets and customers, *(ii)* how to identify and contact reliable commissioned sales agents, and *(iii)* the typical financial and other arrangements with such agents.

Most, though not all, large companies prefer, however, to deal directly with their customers. For example, in Mauritius,

> the preference for direct contacts—a tendency noted among most of the large, well-established exporters in SADC—was defended because it reduces miscommunication and slashes sales costs. As one interviewee asserted, "Many agents and middlemen will take you for a ride". Another opined, "Agents are necessary initially, before customers have confidence in you, … but [they don't] help communication. [They] deter it." To realize economies of scale and reduce uncertainties, the firms prefer to deal directly with a small number of long-standing clients, many of which are the largest buyers in the world and maintain offices in Mauritius. Frequently, dealing direct also reduces transaction costs (i.e., letters of credit) since, as confidence increases, deals are done with trust and mutual cooperation (Coughlin and Jeetah 2001:23).

Despite these caveats, many large producers do use agents to market a portion of their sales. As for the purchase of inputs, large mature companies typically have well established systems and channels to get good quality, competitively priced raw materials from reliable suppliers.

Still, the region has many companies that need to make the transition into the global economy and need help to do so. Mostly, they need information about competitive and reliable supplies for thread, yarn, fabric and accessories and a good means to quickly learn about markets, potential customers, and reliable fairly priced agents to represent them to customers. They also need information about technology, not so much about machinery, but rather about managerial and technical systems and where to get help on setting these up.

Finally, regional and international investors need information about reliable partners in the region with whom to develop supply pipelines and strategic alliances. The same database can serve to guide investors in identifying factories worthy of substantial investment for rehabilitation and investment with an eye toward the global market. TIMSSA (www.timssa.co.za) already has such a database with detailed information, updated biennially, about nearly 500 textile and garment companies in the region. The information is for sale commercially and serves as a basis for guiding potential investors on a consultancy basis.

To obtain accurate and timely data on the performance and structure of the SADC region's textile and clothing industry is extremely difficult. This hinders both policy makers and potential investors. If the textile and clothing industries are considered priority sectors, the following is the minimum statistical information (in addition to the information about input sources, customers, agents, and technology) that should be gathered and published on SADC's web site. The data for fabric and garments must be in square metres and square metre equivalents as well as weight and pieces (for garments) because AGOA quotas are in terms of square metre equivalents, the European Union reports imports of these products in tonnes, and, for garments, pieces is the most frequently used measure of productivity.

Table 35. *Minimum reporting requirements for industry performance data*

Data required	Units of measure	Reporting frequency	Possible sources
Labour: • Total wages paid by sector (garment and textile) and country of origin (or, at least, SADC and non-SADC) • Total number of employees by sector, country of origin, in the categories of: unskilled, skilled, supervisory, technical, managerial • Shifts worked and workers per shift	Dollars Number of employees Number	Annual Annual Biannual	National labour departments or employer reports National labour departments or employer reports National labour departments
Exports for each country by four digit HS codes and by destination country (HS chapters 50, 61, 62 and 63)	Dollars Volume as follows: *Yarn:* tonnes *Fabric:* m² and tonnes *Garments:* pieces, tonnes, and square metre equivalents	Annual	National customs services
Imports for each country by four digit HS codes and by source country (HS chapters 50, 61, 62 and 63)	Dollars Volume as follows: *Yarn:* tonnes *Fabric:* m² and tonnes *Garments:* pieces, tonnes, and square metre equivalents	Annual	National customs services
Total production for each country by four-digit SITC code (revision 3) for all clothing, fibre and textile sectors	Dollars (raw material plus value added) Volume as follows: *Yarn:* tonnes and Ne count* *Fabric:* m² and tonnes *Garments:* pieces, tonnes, and square metre equivalents	Annual	National departments of industry, or manufacturers' reports
Total consumption of **raw material** by four-digit SITC code (revision 3) for all fibre and textile sectors	Dollars (manufacturers' purchase price) Volume as follows: *Yarn:* tonnes *Fabric:* m² and tonnes	Annual	National departments of Industry, or manufacturers' reports
Capacity utilization	In addition to the data on labour and shifts, manufacturers need to be asked about slack, i.e., the potential to increase production with the same workers	Biannual	Annual census of manufacturers

Note: Though we suggest that most data, except for capacity utilization, be gathered annually, the long-term goal would be to obtain it more frequently.

* Ne count is a widely used measure of the weight of yarn per liner measure. The count is required to evaluate productivity as spinning production rates vary with yarn count.

Logistical Standards

One of the most significant developments in the garment supply chain in the United States over the past 20 years has been the introduction of sophisticated logistics technologies. As a result of these technologies, order-cycle times are now discussed in hours instead of days and weeks.

The three most important logistic technologies enabling this reduced order-cycle time are:

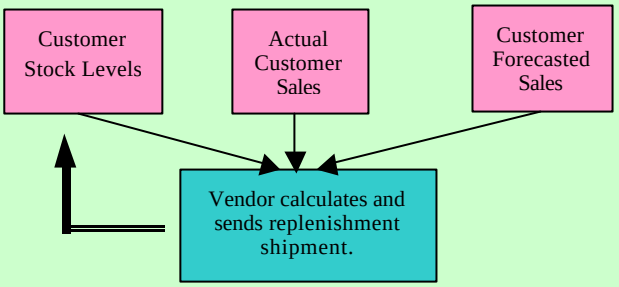
- electronic data interchange (EDI)
- vendor-managed inventory (VMI)
- bar coding of products and shipping cartons

These technologies are common in the U.S. and are being rapidly introduced in Europe. Some of the leading retailers in South Africa are also beginning to use them. In order for manufacturers in SADC to compete effectively in the European and U.S. markets, they will have to adopt them. If manufacturers and retailers in the region adopt these technologies, the regional garment supply-chain will become more efficient.

Box 8.

Vendor-Managed Inventory

Vendor Managed Inventory (VMI) is a sophisticated system for managing stock and replenishing shipments. The customer does not send orders to its suppliers, but rather shares with the supplier its projected sales or consumption forecast and reports of actual sales or consumption. The supplier uses this data to calculate how much stock the customer has and how much it will need to hold to cover the projected consumption or sales between the current and the next shipment. The supplier sends a replenishment shipment based on this calculation.



The key differences between this process and traditional business practices are:

- The vendor is responsible for maintaining customers stocks;
- Stock levels are based on forecasted future sales and may vary over time;
- Customer stock levels are lower, because the customer receives more frequent shipments that fit its real needs more precisely.

Based on studies in the early 1990s, VMI contributed to inventory reductions of between 25% and 50% (**Table 28** in Box 4).

Electronic data interchange allows suppliers and customers to share data about orders, shipments, inventory and consumption in the volume and speed required for mass markets as well as the detail required for niche markets. Electronic data interchange has been conducted over proprietary value-added networks since the 1970s. In recent years, electronic documents are being transmitted increasingly over the Internet. One of the main goals of the so-called 'e-business' is to develop ways for businesses to exchange information electronically, essentially EDI. The main advantage of e-business is that it is cheaper to set up and use than traditional EDI.

Vendor Managed Inventory (VMI) is a system in which the supplier sends replenishment shipments to the customer based on forecasted future consumption and actual past consumption (Box 7). VMI is a sophisticated business process that requires a strong commitment to make it work on the part of both the customer and the supplier. For business partners to use VMI, two things must be in place. First, they have to be members of a strategic alliance. The close interaction, the high level of trust, and the extensive co-ordination of details make it impossible to implement a VMI arrangement on a casual basis. Second, they have installed information systems that will handle efficiently the large amounts of data VMI processes

generate. The benefits of VMI are enormous. It reduces stock levels, increases sales, and lowers stock-outs and markdowns.

Bar-code scanning of products at retail has enabled suppliers to know the exact sales of each item in real-time and, thus, to be able to calculate the quantities that must be shipped to meet the forecasted required stock levels. Bar coding of shipping cartons has enabled the use of automated shipping systems that reduce handling and transit time and make it possible to ship efficiently small quantities of many items.

Many exporters will find their customers forcing them to adopt these technologies. Rather than wait for this to happen, manufacturers can anticipate the need to adopt these technologies. Three good strategies are to:

- begin with suppliers rather than customers;
- begin with regional partners rather than export customers; and
- implement regional standards that are compatible with international standards

The experience in the United States is that working with suppliers to develop and implement these systems makes sense for two reasons. First, you as the customer take the lead and thus manage the process. Second, the penalties for mistakes are greatly reduced since your supplier has a strong incentive to continue working with you as the process suffers trials, errors and growing pains.

A similar argument can be made for developing the systems in conjunction with regional partners rather than export customers. Regional partners are geographically closer and this reduces communication time and costs. Since these technologies are new to the region, such partners will appreciate the opportunity to introduce processes that have proved successful elsewhere. Furthermore, the regional partners may be more willing to accept the inevitable difficulties in implementing new techniques, whereas export customers, who already use them, may be less patient.

The third strategy is the one that will require regional cooperation and facilitation. In the U.S. and Europe, the textile and clothing industries worked together with retailers to develop standards for product specifications, product labelling, data interchange and shipping. Private-sector groups, under the sponsorship of the recognized standards institutions, developed the detailed standards for the industry within the framework of generic inter-industry communication and labelling standards.

SADC does not need to reinvent the wheel. The best strategy is to learn from the experience of others. It is important, however, to have a regional body that can set agreed standards applicable to the region and in harmony with the international ones.[126] A regional body affiliated with international organizations can resolve detailed issues that arise, and ensure that participants have access to the latest technology.

The newly formed Association of SADC Chambers of Commerce and Industry can be the umbrella organization that manages the establishment of standards. This organization can facilitate the introduction of the new technologies by providing *(i)* forums for the industry-standard-setting bodies, *(ii)* links with the international standards setting bodies, and *(iii)* co-ordination among national and industry groups.

The SADC governments will need to give legal sanction to these standards. Electronic documents need to be acceptable as legal documents in trade, if they conform to the require-

[126] For example, electronic shipment documents can contain data necessary to verify SADC rules of origin. Another possibility is for these documents to carry the data needed for regional statistics on the industry (see section on Information.)

ments of the regionally accepted standards. The United States passed a law in 2000 accepting the legality of electronic documents that can serve as a model for the region.

The use of EDI and industry standards in communication and labelling is widespread in the international textile and clothing industries; and the pressures will be strong for regional suppliers in these industries to conform. Indeed, SADC should implement such standards as soon as possible. Since much of the work has already been done in setting the standards for these industries, SADC could adopt with little difficulty those compliant with international norms but suitable for the region. As a result, it makes sense for the textile and clothing industry to be the pilot for developing these electronically based inter-industry linkage standards for the region.

Links between Small and Large Producers

Two types of linkages between small and large producers in this industry already exist in the region:

- hiring of small firms that provide specialized services such as mark-up, cutting and embroidery;
- subcontracting simple or less demanding work out to cut-make-and-trim operators; and
- selling cloth to formal and informal tailors who arrange their own customers.

Indeed, subcontracting to formal and informal cut-make-and-trim operators appears to be increasing, especially in South Africa (House and Williams 2000:3).[127] The section on Tariffs and VAT (p. 54) examined how in some countries tax regulations encourage subcontracting and, in others, unfortunately discourage it. The trend is beneficial.

- Small- and medium-size producers can hire specialized services without investing in extra capital while still benefiting from the economies of scale that such services can achieve. The availability of such services augments the range of products a small producer can offer and, hence, his flexibility and competitiveness.
- The use of cut-make-and-trim operators allows large firms to concentrate on more exacting work.

Thus, the tax and regulatory hindrances to subcontracting should be removed.

As for the sale of cloth to small tailors, one must realize that, for certain types of clothing, they can produce acceptable quality garments for their clientele. Moreover, they have a *competitive advantage* in their proximity and response to the personal desires of the customer and a strong *pecuniary disadvantage* in that they usually buy cloth from retailers at a considerable mark-up over the ex-factory price paid by their competitors, the large clothing manufacturers. Such tailors would be greatly assisted if they could bypass the wholesalers and retailers by pooling their resources and buying small quantities of a subset of popular fabrics (e.g., 50- and 100-metre rolls) for cash from a factory outlet—maybe just a window in the factory wall—open, perhaps, just once a week. The proposal is simple to execute and, if

[127] "Between 1996 and 1999, the decline in formally recorded employment in the clothing sector was 18,300. This decline appears to be exaggerated and not an accurate reflection of actual job loss, but a reflection of a shift in the nature of employment. The shift is an amalgamation of the following trends: subcontracting of workers by firms, subcontracting of production" to register or non-registered firms, and increases in production in households. For example, in the Western Cape, "there is an increasing trend towards informalization and outsourcing, with some relocation to other SADC countries; and, in Kwazulu-Natal, there is "a tendency towards informalization, with close linkages to decentralized areas" (House and Williams 2000:3 and 5). On this, also see Salinger et al. (1999:43).

executed, would represent a significant transfer of income from middlemen to these small entrepreneurs, a class that governments in the region want to encourage. Given the ease with which this can be done, governments could appeal for and get many factories to co-operate.

Regional Investment Promotion: A Job for SADC Inc.

At present, investment promotion in the region is conceived of and done with a national focus and, to a large extent, passively. In the textile and garment industries, where efficient pipelines—from fibres to garments—are critical to success, this orientation is inappropriate. Instead of awaiting for potential investors to think of projects, study their viability, and invest in their execution, the region needs to take a pro-active approach, visualizing linkages, studying specific obstacles, lobbying where appropriate for their removal, and selling potential investors on the idea of simultaneous cross-border investments within the region in order to take advantage of or create efficient pipelines.

For this, SADC needs **SADC Inc.!** Backed by a strong statistical base, industrial research capability, and a senior executive with industrial managerial experience, SADC Inc. would pro-actively promote synchronized industrial investment projects within the region. Perhaps as a joint project of SADC and the Association of SADC Chambers of Commerce and Industry and with major regional and international development banks plus development organizations such as TIMSSA on the board of directors, SADC Inc. might initially prioritize the textile and garment industries, especially considering that the international juncture is highly propitious for their development now in the region. SADC Inc. could also host the Web site offering an array of services, information, and relevant hyperlinks for manufacturers and potential investors.

Certification of AGOA Visa Systems

The slow approval of the visa systems required for a country to be eligible under the apparel provisions of AGOA is a disaster for the region. Apparel-eligible countries may only buy yarn or fabric from other such countries. With only six SADC countries—Botswana, Lesotho, Malawi, Mauritius, South Africa, and Swaziliand—so far possessing approved visa systems and with Zimbabwe not even on AGOA's list of potentially eligible countries, the region's ability to develop effective supply pipelines is severely constrained. Therefore, if a country lags in getting approval, it should gravely concern the entire region. Indeed, the lack of approval is a blow to the enabling environment for this industry in the region and threatens to waste much of the time during which the preferences availed to the region under this act will be in force.

With donor support, SADC should immediately mount a one-year effort to accelerate these approvals by sending specialists to counsel governments on how to proceed and to explain to them the types of systems and legislation that have already gained approval within the region. Senior SADC personnel should also lobby to get **all** countries to apply, even those that have done little in that direction so far.

Conclusions

Globalization both menaces and offers opportunities to the SADC region. For the textile and garment industries—this report's focus—the European Union has long been tariff- and quota-free for most such exports from sub-Saharan African countries, except South Africa. Now, with the South Africa/European Union Agreement, even that country will benefit as will those SADC countries that would like to use inputs purchased from it to make products for export to Europe. Likewise, in October 2000, the African Growth and Opportunity Act (AGOA) eliminated the tariff and quota barriers to the U.S. market for sub-Saharan African countries that get their visa systems approved. Thus, the barriers for regional exports to these huge markets[128] are gone or falling … preferentially.

But the preferences are temporary. Therein the menace! In January 2005, the Agreement on Textiles and Clothing will finally phase out all quotas. With quotas gone, the new trade regime will unleash the Asian and other highly efficient competitors while keeping them only hobbled by the remaining tariffs imposed on countries not covered by AGOA or the Lomé/Cotonou agreement, tariffs that are being steadily phased down. Even the tariff exemption for sub-Saharan African countries covered by AGOA's apparel provisions will end in September 2008. After that, barring an extension of the law, sub-Saharan Africa will have to compete in the U.S. market on even footing, head-on with the world's best. By then too, the regional preference agreements with the United States and the European Union will have proliferated, greatly diluting their advantages.

The threat compels urgency. SADC countries must take advantage of the period before the onslaught to use the present—but temporary—preferential incentives to build a large technologically and managerially robust textile and clothing sector with strong linkages from fibre to clothing. Good linkages imply reduced costs and an increased ability to compete on global markets and defend against threats to market shares once preferences vanish.

In that task, the countries in the region have both advantages and disadvantages. The region produces and exports cotton, cotton that could be grown even more plentifully and utilized in a high value-added pipeline making yarn, fabric and clothing. Most countries have cheap or moderately priced electricity; and many have cheap labour ideal for garment manufacturing in the low end of the market. Others with more expensive labour have sophisticated, high precision clothing factories with good capability to make original and appealing designs for the high end of the market where they are still competitive. Some firms have accumulated significant experience in international marketing and earned a reputation for reliability and quality. Such firms are able to guide a whole chain of suppliers to properly satisfy customers. Finally, in many countries, large industrial cities are in ocean ports with good shipping connections to principal markets in Europe and North America.

Major problems exist too. The region has a huge shortfall in fabric production, necessitating big imports. Productivity is also low compared with Europe and the Far East though, in many countries, that is offset by very low wages. Managerial, supervisory and technical skills are in short supply; and formal training institutions appropriate for the industry are few and offer but a subset of the required courses. Moreover, the management techniques used in many factories are inadequate and provide little motivation for workers to strive for significantly higher productivity. This, in many countries, is partly due to the absence of institutions capable of encouraging advanced management systems. Some countries must incur large

[128] Under modest growth assumptions for U.S. apparel imports (continuing the average growth over the last 10 years), AGOA will be worth about $15.5 billion over the eight years (Table 37). If SADC captures only a quarter of that it will be a huge benefit to the region.

inland transport costs just to get cargo to a port. And the inland transport infrastructure is sometimes wretched. Coastal shipping is also inadequate.

On top of these technical problems, industrialists often endure adverse regulations and fiscal policies that *(i)* hamper their choice of a management team and the use of expatriate technicians, *(ii)* delay customs clearances for raw materials, spares, and equipment, *(iii)* grossly complicate and slow down the process of setting up a functional company, *(iv)* protect communication and electricity monopolies that charge excessive rates for poor service, and *(v)* impose taxes that are never or very belatedly refunded to exporters. Thus, in some countries, the operating milieu is, at best, sub-optimal.

Then there is the Zimbabwe meltdown with rampant inflation, a hugely overvalued currency, desperate fuel shortages, and scared investors, all this in a country that has a strong though somewhat bludgeoned textile and garment industry together with the region's best cotton. Worse yet, for political reasons, Zimbabwe is ineligible under AGOA. This means that producers in SADC, except for those in least developed countries,[129] may not use Zimbabwe yarn or fabric in garments exported under AGOA to the United States. AGOA gives, but AGOA also takes away, denying a key player in one of the region's most competitive supply pipelines.

Closely linked supply pipelines—from fibre to garments and onward to the consumer—must be created because close linkages imply reduced costs for transportation, communication and inventories. In some cases, proximity also speeds decisions thus shortening the pipeline and improving competitiveness in the fast changing markets for clothing. To run those pipelines efficiently, the best ones are co-ordinated by strategic alliances using Quick Response techniques covering each stage of production and distribution: fibre–yarn–fabric–garments–wholesaling–retailing. An alliance is complex and requires eager co-operation and the willing exchange of information to enable time to be saved and costs cut at each of these stages. Saving time also increases the pipeline's flexibility to respond quickly to demands of an ever more diverse, consumer-oriented market. Speed and flexibility yield competitive advantage. Thus, the alliance strives for optimality, choosing, for each stage, to produce using the most efficient and consistently reliable producers and locations, often creating supply pipelines involving multiple countries.

Efficiency, however, is in large part determined by the macroeconomic, regulatory and policy environment in each country and within the region. Besides conducive national macroeconomic environments, successful supply pipelines require the removal of barriers to trade and to the free movement of managers and technical personnel who are citizens of countries within the region. In this context, SADC countries should seriously consider adopting—at least on a pilot basis for these industries—provisions guaranteeing the automatic approval of work permits for up to a certain percentage of each factory's total workforce. Moreover, despite the region's massive shortfall in the production of fabric and man-made yarn, many inefficiencies and inequities ensue from attempts to regulate the trade in yarn and fabric. Therefore, SADC as a community (or, less ideally, each country by itself) should adopt Mauritius' successful model: the abolition of all **intra-SADC** and **external Most-Favoured-Nation (MFN) tariffs** and **value-added taxes** on equipment, spare parts, and raw materials used by the textile and clothing industries. SADC should adopt a policy that *regional is local* implying the elimination of all intra-SADC barriers to trade in fibre, yarn, fabric **and** clothing.[130] With one blow, these reforms would eliminate many bureaucratic inefficiencies, e.g., the need for pre-shipment inspection, the delays and demurrage charges incurred while

[129] Lesotho, Swaziland, Mozambique, Malawi, Tanzania and Zambia, but only through September 2004

[130] Under this proposal, only clothing would keep the MFN tariffs and, hence, remain protected against imports from outside SADC.

clearing goods through customs, and the need for bonded warehouses.[131] This would facilitate efficient strategic alliances for supply pipelines serving both the intra-SADC[132] and external markets, thus simultaneously enhancing import substitution,[133] economies of scale, specialization, and better management processes. This reduces costs and improves quality and, thereby, assists export promotion, which brings further gains in efficiency. Investment promotion centres throughout the region should also be converted into true one-stop-shops. In the end, with an easy fiscal policy and, hence, fast customs clearances plus a limited but guaranteed right to choose managers and technicians, investors would receive a clear message: *welcome!* And those desiring to set up strategic alliances would be unencumbered by the present barriers.

Growth will also increase the need and, if policies are right, the demand for training thereby motivating factories and educational institutions to offer a wider spectrum of relevant courses. Till now, the organization of industrial training for this sector has been almost exclusively focused on the factories in each country. Despite the scarcity of certain types of training specialized for these industries, there has been no comprehensive regional study of these industries' training needs nor of the availability of courses to satisfy them. To assess this requires such a study with a view toward setting up or expanding *regional* training institutions and technology centres for this sector where required.

Information and research are also needed. Producers, especially those with yet little experience in international markets, need to know about markets for inputs, potential customers, and reliable sales agents; and potential investors require information about installed capabilities and product ranges and qualities within the region. TIMSSA gathers and sells information about textile and clothing production by country within the region; but a system is required to gather and avail the rest. This would be best done within a framework for promotion, on a regional scale, of both investment and exports. For such, we advocate the creation of **SADC Inc.** under the joint auspices of SADC and the Association of SADC Chambers of Commerce and Industry. Besides the dissemination of information, SADC Inc. would promote the formation of strategic alliances between producers and large retail chains and advocate this as a major technique for cutting costs, speeding up delivery, and increasing the pipeline's responsiveness to customer needs—in short, a technique for world-class competition.

If achieving world-class competition is indeed the goal, the inward looking, defensive development model must be abandoned. If SADC countries—especially the regional powerhouse, South Africa—continue protecting inefficient and uncompetitive textile and garment factories, everyone, including the more progressive and successful producers will suffer. When clothing imports comply with the double transformation rule, SACU slaps tariffs on their full value even if the inputs used to make them came from SACU. This limits such imports and, ironically, the demand for textiles made in SACU, especially since the South African clothing manufacturers are under heavy assault by third-country imports. Hence, the policy merely diverts trade to Asian suppliers. On top of this, the SACU quotas enforced by South Africa for MMTZ countries are **trivial** for fabric and **very small** for clothing, utterly insufficient for them to build up their industries. With such a defensive attitude, strategic

[131] Short of eliminating MFN tariffs on inputs, the countries with yet no provisions for export processing zones or their equivalent should adopt the necessary enabling legislation, a still awkward second-best solution.

[132] In some cases, alliance partners may prefer to gain experience using Quick Response techniques in the intra-SADC market and later expand to into external markets using these techniques.

[133] In 1999, SADC countries imported $270 million dollars of clothing and $1.1 billion of textile and fibre from outside SADC (see p. 99). If, by increasing efficiency, SADC manufacturers could displace even a quarter of those imports, it would greatly benefit the region. This does not even include any future growth, which is sure to happen as the population increases and national incomes rise.

alliances and efficient pipelines will be hard to build; and, though growth will occur, it will be hindered by fiscal and bureaucratic obstacles.

The restrictive tariffs and rules of origin also ignore two screaming realities. First, the region has a shortage of man-made fibres while consumers in the region express a big demand for garments using such fibres. Therefore, regional supply pipelines will not be able to replace much of these imports coming in from outside SADC unless they can import fibre, yarn or fabric and use these to make garments deemed to be of SADC origin. Second, the region apparently has a surplus of cotton that is exported rather than converted within SADC into textiles and garments. Restrictions on intra-SADC trade inhibit efficient regional pipelines from using this cotton to replace imports of textiles and garments from outside the region.[134] Insistence on double-transformation rules is thus an **impediment** to regional growth. Indeed, regional free trade is a precondition for the creation of efficient supply chains, which is one of SADC's key objectives.

Which path to choose? Will SADC countries adopt policies permitting them to seize the opportunities now offered? Or, will they continue to insist on small advantages over each other in their tiny internal markets protected by tariff barriers and bureaucracy, which together hamper the establishment of highly efficient strategic alliances for supply pipelines from fibre to cloth and onward to the consumer?

Will we, in our myopia, let the opportunity pass by? Or, shall ours be a global vision?

[134] Zimbabwe is not AGOA-eligible but Lesotho, as a lesser developed country, may import Zimbabwe fabric to make AGOA-eligible garments. But Lesotho may not freely import Zimbabwe fabric to also make garments for the SACU markets (principally South Africa). If there were no restrictions on using the fabric in Lesotho, Zimbabwe fabric manufacturers would be able to increase the volume of production and thus lower costs through economies of scale. If Lesotho garment manufacturers could use the Zimbabwe fabric, already the cheapest in the region, they could produce better priced garments for the South African market. This would lower prices for South African consumers, increase the volume of retail sales (75% of the value-added going to local retailers and wholesalers), and create many more jobs than whatever is lost in South Africa's capital intensive textile industry as a result of fabric imports from Zimbabwe. Furthermore, Lesotho and Zimbabwe manufacturers would have the opportunity to start developing Quick Response-based strategic alliances with South African garment merchants and retailers, thus improving the competitiveness of that supply chain and stimulating a further demand response.

Recommendations

Macroeconomic Environment

- Fast inflation, high real interest rates, and significantly overvalued currency are a deadly environment for investment and export promotion. For serious industrialization, governments must keep inflation and real interest rates moderate and liberalize foreign exchange.

Policy and Regulatory Framework

Tax Policy

- *Regional-is-Local Policy*. All SADC member governments should officially adopt the policy that *regional is local* when considering all matters of trade and investment in the textile and clothing industries.

- *Tariffs and Profit Taxes*. Since many textile mills have become internationally competitive as manifested by their already large exports, the remaining mills would benefit from increased competitive pressures to *either* improve their productivity *or* sell out to others possessing the know-how and resources to do so. The time has come for the mills to target, directly or indirectly, large external markets especially in Europe and America. SADC member states should, therefore, immediately *eliminate all tariffs* on **intra-SADC** and **external** trade in raw materials, accessories, productive equipment, and spare parts used in the textile and clothing industries, thus only maintaining protection for clothing manufacturers. Textiles would, therefore, be totally liberalized; and garments, subject to a *single transformation* rule of origin to be eligible for preferences for intra-SADC trade. Thus, the effective rate of protection would be strengthened against garments made *outside* SADC but slashed to zero for those made within the region. Doing this would stress that *regional-is-local* and thereby encourage the development of strategic alliances among manufacturers and retailers in the region.

  To encourage swift growth of the textile and clothing industries, corporate profits taxes on these industries should be reduced to not more than *15% on profits* for factories not operating within an export processing zone. In a growing industry, the decrease in tax revenues would be quickly offset by growing revenues from profits taxes and value-added taxes on activities stimulated by the multiplier effects of the spending engendered by the different beneficiaries of the growth in these industries.

  These tax reductions will also enable SADC countries to abolish pre-shipment inspection on the above goods and reduce the frequency of customs inspections at the ports and interior frontiers for such goods and the consequent delays and expenditures for warehousing of goods awaiting release by the customs authorities. This will slash and make more predictable the transit time for raw materials to reach factories, a critical consideration given the stress international clients put on timely deliveries. In countries that still require import licenses, the elimination of tariffs would also remove any remaining justification for licenses for such goods.

- *Tariffs, an Alternative Proposal*. Till the above fiscal recommendations are implemented, individual governments must opt—respectively—for second-, third-, or fourth-best

solutions: *(a)* export processing zones, *(b)* well functioning duty and tax suspension schemes for export-oriented producers, or *(c)* duty- and tax-drawback schemes for exporters. The latter two schemes are, by far, inferior to export processing zones, especially if individual export-oriented factories are permitted the ample privileges granted to such zones. Moreover, countries that only create export processing zones in a few designated areas discriminate against local factories that may want to expand and become export processing firms benefiting from the EPZ legislation. Such countries should modify their laws to stimulate local manufacturers to invest and export.

Also pending the broader liberalization advocated above, SADC countries should eliminate the tariffs on the import of man-made fibres and yarn and fabric made from man-made material, as well as other fibres that are not available or are in short supply in the region.

- *SACU Textile and Garment Quotas for MMTZ countries*. Since manufacturers must have generous quotas to be able to plan, invest and grow with confidence, SACU should grant MMTZ countries generous quotas well above their present capacity levels and rely mostly on monitoring and factory visits to guard against trans-shipment. Moreover, if violations are discovered, penalties should be applied to **only** to the company or relevant investor group, not to a countries entire industry.

- *Export Processing Zones*. Since EPZ factories are often some of the most efficient in the region, SADC should explicitly deem them to be within the geographic area covered by the Trade Protocol albeit as a special category. As such, these factories and others operating under schemes privileging export-oriented manufacturing would be allowed to sell within the region up to 20% of their output and benefit from SADC's concessionary tariffs so long as *(i)* they pay duties to the SADC country of origin on the imported **inputs** used therein; *(ii)* they pay profits taxes on the portion of their sales made within the region; and *(iii)* the products satisfy the corresponding rules of origin. The Member State where the factory is located would be responsible for enforcing the 20% limit.

- *Export Service Zones*. SADC countries should extend the same investment, tax and operating incentives to service companies working in the textile and clothing industries that they extend to manufacturers. The working model is the Export Service Zone that Mauritius has implemented, which has encouraged the creation of textile agencies, testing services, and logistics companies to service the export sector.

- *Taxes on Regional Consultants*. If the region's clothing and textile industries are to compete internationally, they must be able to implement world-class technology and business practices. To facilitate this, the concept of trade in services should be extended to include professional services such as consultancy, testing, management outsourcing, product design, and marketing services. In particular, taxes on payments to SADC-based external consultants should be abolished as a way to give preference to and encourage the development of such services.

- *South African Customs' Interpretations of Tariff Policy*. Pending the abolition of tariffs on inputs and spare parts used by the textile and garment industries, the South African Revenue Service should verify that, in practice, the value of South African fabric used to produce imported clothing is deemed non-dutiable.

Human-Resource Policy

- *Regional Migration.* As a pilot project in migratory policy, SADC member countries should make the issuance of work permits *automatic* or *unnecessary* for high-level technicians, supervisory personnel, and managers in the textile and garment industries who are SADC-country citizens. Likewise, the issuance of resident's permits for such employees should be automatic. The elimination, on a experimental basis, of migratory barriers would be to the mutual economic and cultural benefit for the countries involved and would further one of SADC's long-term goals, namely, the free movement of labour in the region.

- *Training Levies.* As part of a long-term effort to reduce dependence on expatriate personnel, SADC should encourage all member states to apply a 1% or 2% training levy on total salaries to create a fund in each country to reimburse manufacturers for expenses incurred for formal training conducted in in-factory schools and other local or foreign industrial training institutions. Where feasible, preference should be given to training institutions within the region.

- *Training Needs.* SADC should also arrange to study systematically the needs and availability of training in the region for the textile and clothing industries so as to plan to create, strengthen or expand regional training institutions and technology centres to overcome deficiencies.

- *Facilitation of Work Permits for Expatriates.* Since SADC needs to promote the entire region as an attractive destination for investment while also encouraging advanced technical and managerial training for citizens of SADC countries, it should encourage member states to adopt regulations for expatriate labour in such a way so as to advance both goals simultaneously: stimulation of investment **and** better training. Since the cumbersome, slow, impractical and, sometimes, corrupt approval of work permits is a serious deterrent to investment and the efficient operation of the textile and clothing industries, SADC should encourage member states to adopt quick and transparent systems with *minimal scope for bureaucratic discretion.* To achieve both the above goals with a single instrument, we recommend that—on a pilot basis for the textile and clothing industries—states abolish their paper-oriented, highly discretionary systems in favour of a largely **fee-based system** where the funds so raised would be earmarked for industrial training channelled through the industrial training levy fund in each country as recommended above. As a guide for discussion, we suggest variants of the following system to be initially applied only to the textile and clothing industries.

    - In accordance with the *regional-is-local* policy, expatriate managers, supervisors and technicians from SADC countries would not be subject to quotas or fees though they would reduce the allowable numbers of non-SADC expatriates.

    - All companies would have the automatic right to hire expatriates up to 5% of their total workforce subject to the payment of a fee.

    - Within the above quota, posts held by expatriates in new companies or expanded facilities of existing companies would be exempt from the fee for four years. In the fifth year, the number of fee-exempt expatriates would fall to 4% and any posts above that number up to the automatic quota of 5% would have to pay a

substantial annual fee (e.g., $5,000) to encourage firms to train nationals and employ preferentially SADC citizens. In the sixth year, the percentage of fee-exempt expatriates would fall to 3%; in the seventh to 2%; and in the eight year and beyond to 1%. To encourage small firms, those with more than 10 and less than 50 employees would be allowed to employ one fee-exempt expatriate after the seventh year; and those with 51 to 200 employees, two. In all cases, the focus would be on the time a **post** is held by an expatriate, not on the time a particular expatriate had been in service with the company.

- *Piece-rate Pay Systems*. SADC countries should legalize piece-rate pay systems so long as *(i)* workers are guaranteed the minimum wage set for the industry and *(ii)* employers have the ability to dismiss workers who do not produce the equivalent to earn the minimum wage during a period of three months.

Marketing and Monopoly Policy

- *Cotton Markets*. Cotton lint markets need to be liberalised. South Africa needs to end its policy of requiring cotton spinners to use up local cotton supplies before issuing import permits. Zambia needs to adjust its formula for calculating local cotton prices to ignore the fictitious cost of freight and insurance to Liverpool. A more effective solution would be to develop local cotton auctions where cotton prices are set in local currency for current and future delivery. This would enable cotton buyers and sellers to establish prices based on local supply and demand and mediate the local value of adjustments for quality. These auctions would also allow the buyers and sellers to mediate the exchange rate risks that are now borne entirely by the purchaser when prices are based on U.S. dollars.

- *MMTZ Quota Distribution*. Mozambique, Malawi, Tanzania and Zambia should each adopt methods to distribute internally the quotas for exports to SACU to minimize the uncertainties for both manufacturers and their clients while also encouraging the former to expand exports *outside* SADC. Our recommendation for Mozambique can serve as a guide:

  The Ministry of Industry and Commerce should re-evaluate its first-come first-serve method of distributing the clothing export quota for the SACU market. The quota should be allocated for **shipments** *or* for **orders** supported by irrevocable letters of credit. Moreover, as a way to encourage producers to export outside the region, 25% of the quota should be distributed, in the beginning of the year, to the firms in proportion to their prior years' exports *outside* the region; and that portion of the quota could be used at any time during the year. When the other 75% of the quota is eventually given out, the recipients of the initial quota distribution would then be able to continue to export for a while (Coughlin 2001:38).

Administrative Regulations

- *Visa Systems*. The SADC Secretariat should request funding under AGOA from the Office of the U.S. Trade Representative to set up a short-term office or to hire consultants to assist SADC countries to adopt visa systems that will likely get approval. This should include funds to allow a few officials to travel to countries in the region that have been successful in designing and implementing visa systems that gained acceptance. Because the failure of many countries to gain full eligibility under AGOA's textile provisions

hinders the development of intra-country industrial linkages within SADC, this matter should be treated with urgency by the entire community.

- *Electricity*. To make investment more viable, countries whose local monopolies charge exorbitant prices for electricity should, as a temporary measure, eliminate the VAT and excise taxes charged on electricity used by the textile and garment industries. In the long term, however, technological and managerial solutions must be sought.

- *Telecommunications*. Protecting local telecommunications companies by laws upholding their utter monopoly over and, hence, their suppression of modern and cheap Internet technology for telephony and fax services is extremely costly to both nations and their manufacturers. Governments must, therefore, liberalize these activities and permit competition, thereby allowing companies the same advantages as their international competitors have.

Institutions

- *Inter-industry Electronic Data Interchange and Bar-coding Standards*. Electronic data interchange and bar-coding on products and cartons require a regional standards organisation that has the legal authority to set inter-industry legal standards among SADC manufacturers, wholesalers and retailers in the garment supply chain that are compatible with international standards. This is especially urgent as export customers will demand that SADC suppliers use the techniques. Anticipating this, SADC suppliers should begin to implement and use them for intra-SADC trade. In this way, they will gain experience, iron out the bugs, and even be in a position to offer advanced logistical services proactively.

- *Customs Reform*. In part related to corruption, the often large delays in customs' clearance of imports imply costs and risks for both manufacturers and their clients and deter sales. Since the pervasive corruption in many of the customs services within the region subverts policy, reduces governmental revenues, and encumbers business activities, governments must strive to combat such practices by *(i)* reducing excessive tariff rates to lessen to the incentive to bribe, *(ii)* increasing salaries and emoluments for customs officials to improve their loyalty, *(iii)* monitoring to more readily detect malpractices, *(iv)* simplifying and computerizing systems to make vigilance against corruption easier, and *(iv)* applying more consistently the economic and criminal penalties allowed within the law to deter both bribe giving and taking.

  Administrative measures apart, significant political forces within society must be mobilized to oppose criminals in high government posts from utterly subverting otherwise well designed systems. Indeed, in many cases, the task is more political than technical or administrative and depends in large part on the vigilance of civil society and its willingness to oppose powerful kleptocrats who often walk away even after being caught.

- *Zimbabwe's AGOA Ineligibility*. The ineligibility of Zimbabwe under AGOA denies the entire region a competitive hub for many supply pipelines. Therefore, with approval of the Zimbabwe government, SADC should co-ordinate lobbying activities to get the United States to include Zimbabwe under AGOA. In this effort, the community should

mobilize lobbies[135]—retailers, buyers and garment merchants—who would benefit from having Zimbabwe yarn and fabric available for AGOA-eligible garments. As part of this effort, SADC should try to get the United States government to agree to specific actions to be undertaken by Zimbabwe to make it AGOA-eligible.

Zimbabwe should also begin immediately to negotiate with United States Trade Representative to get a visa system approved and operational as done by Mauritius even before AGOA was passed. Zimbabwe can get a system approved even before being officially designated as eligible under AGOA.

Infrastructure

- *Electricity*. Countries with unreliable electric supplies need take steps to improve them, particularly to areas with textile and garment manufacturing as a matter of top priority.

- *Transportation Costs*. The SADC Transport Commission should undertake a study of the regional transportation infrastructure and freight costs that are particularly important to increasing trade in fibre, textiles and clothing in the region. Identifying improvements to the transportation infrastructure should be treated as a top priority.

- *Walvis Bay*. Walvis Bay is a valuable regional resource for the textile and clothing industry as it offers a 10-day shipping advantage to the U.S. and Europe over Durban. The effectiveness of this port, however, depends on increasing traffic through and sailings from the port. All efforts should be made to facilitate and promote its use.

- *Maritime Feeder Services*. The region suffers from a lack of maritime feeder services serving the continental ports and Mauritius. SADC should seek funding to do a feasibility study on developing such feeder services.

Technology and Industrial Deepening

- *ISO 9000 Promotion*. Governments should actively promote quality as objective and encourage firms to seek ISO 9000 certification. SADC, under the auspices of the SADC programme on Standardization, Quality Assurance, Accreditation and Metrology and the Association of SADC Chambers of Commerce and Industry should develop a SADC quality award to encourage quality awareness.

- *ISO 9000 Certification Services*. Countries that do not have an accredited agency that can certify firms as ISO 9000 compliant should have their national standards bureau contract with the bureau in a neighbouring country that is accredited.

- *Privatization of Factories*. Governments should move to privatize the remaining publicly held firms in the textile and clothing sector that are idle or operating substantially below capacity. Potential investors should be sought who can bring managerial, technical and marketing expertise. Governments should also promote the possibilities of developing strategic alliances through investment in these companies.

[135] as done successfully by the Mauritius Export Processing Zone Authority on behalf of Madagascar

Marketing and Information

- *SADC Inc.* SADC needs **SADC Inc.** to research and energetically promote synchronized multi-country investment projects in the region. It would also organize a Web-site, perhaps in co-operation with existing information and research organs, to furnish manufacturers information about reliable and competitive international and regional suppliers and about potential customers and dependable, fair-priced sales agents and their contacts. Perhaps as a joint project of SADC and the Association of SADC Chambers of Commerce and Industry and major regional and international development banks plus development organizations such as TIMSSA on the board of directors, SADC Inc. might initially prioritize the textile and garment industries, especially considering that the international juncture is highly propitious for their immediate development in the region. While SADC Inc. will initially need strong support and financial assistance from diverse sources including SADC itself, SADC Inc. should be structured so as to give a dominant voice in its governance to the private-sector participants.

- *Data Gathering.* The lack of timely, specific information about the activities and performance of the textile and clothing sectors in the region is a serious barrier to rational policy making. It also makes it difficult to assess the potential for the region to increase production and meet market demands. Such information would also help investors and investment promotion agencies and encourage investment in viable facilities in the region. SADC needs to sponsor a regular, comprehensive program to gather this data and publish it on its web site. A detailed list of the minimum data required is given in Table 35. In this context, SADC should see if it is possible to contract the services of TIMSSA to publicize its biennial database on this industry and, if necessary, to improve its coverage.

- *Labour Costs.* Labour cost is a key element in the competitiveness of garment manufacturing. The available data is neither comprehensive nor up-to-date. As a result, SADC should sponsor a study of the labour costs in the garment and textile industries in the region. This study should cover a large sample of manufacturers and produce detailed wage profiles by industry segment, employee category, and length of service. In addition to wage rates, the study should report on labour regulations, both legal and collective bargaining, mandatory and actual fringe benefits, and social charges such as training levies, pension and national health contributions, and the use of piece-rates and other productivity related payment schemes.

- *Informal Clothing Markets.* Governments need to undertake detailed studies of the informal markets in clothing and textiles in the region. These studies will include not only the nature and volume of the products sold, but also an analysis of how these products are distributed. Supplying these informal markets is a significant opportunity for SMEs; and these studies are important way to support their development.

- *Trade-Fair Attendance.* Regional delivery pipelines must understand the needs of export markets. For many market segments, the most efficient way to get this understanding is through attending trade fairs and meeting with buyers visiting the region. Governments should assist textile and clothing producers to attend trade fairs and should promote buyer visits to the region. As part of the *regional is local* policy, SADC and the member states should co-ordinate these activities so that the assistance is not limited to national industries, but includes their partners regardless of the location within SADC.

- *Regional Trade Fair.* The Association of SADC Chambers of Commerce and Industry should organize a regular regional textile and clothing fair to promote exports and intra-regional trade.

- *Cross-Border Supply Pipelines.* SADC-country governments should actively promote investment in the region stressing the opportunities to develop regionally-based competitive garment-delivery pipelines. The investment promotion should stress the varying competitive advantages in different countries and the opportunities to develop strategic alliances among competitive firms in several countries.

Private-Sector Initiatives

The biggest problem the textile and clothing sector in the region faces is a shortfall in yarn and woven fabric production. The public and private sectors must urgently focus attention on increasing textile production in the region.

It is private-sector firms whose efforts and investments will boost production and trade in SADC's textile and clothing sectors. This report has discussed in detail in the **The Way Forward** various initiatives the private sector should undertake to develop garment-supply chains that are regionally and internationally competitive. The key private-sector initiatives are:

- implement strategic-alliance partnerships;
- identify markets and their precise needs in terms of product, quality, response, and price;
- select competitiveness strategies and implement necessary changes in business and manufacturing processes and equipment;
- develop and implement regional inter-industry linkage standards to support the use of new logistics and computer and communications technology using the textile and clothing industry as a pilot;
- improve staff skills through regular formal, training programs;
- implement ISO 9000 and improved quality-control procedures;
- implement Quick-Response technologies; and
- implement industrial engineering programs to reduce the time and cost to produce garments.

The recommendations for the public sector are actions that will support and facilitate these private-sector initiatives.

Annex 1. SACU textile and garment exports to and imports from **Mauritius** (million Rands)

HS	Description	Exports				Imports			
		1996	1997	1998	1999	1996	1997	1998	1999
50	Silk, silk yarn, and silk-based fabric	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.06
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	11.47	17.44	13.62	21.11	0.12	0.40	0.05	0.00
52	Cotton and cotton yarn and fabric	4.16	8.64	7.24	39.71	0.40	3.48	2.93	4.43
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn.	0.06	0.16	0.10	0.00	0.00	0.00	0.00	0.05
54	Man-made filaments; yarn and fabric thereof	1.78	2.22	2.37	3.37	0.12	0.10	0.26	0.30
55	Man-made staple fibres; yarn and fabric thereof	2.43	1.30	0.69	1.47	0.00	0.00	0.08	0.00
56	Wadding, felt and non-wovens; special yarns; twine, cordage, ropes and cables and articles thereof	2.59	3.12	3.26	3.78	0.00	0.24	0.20	0.16
57	Carpets and other textile floor coverings	2.59	2.06	1.43	1.39	0.07	0.03	0.04	0.03
58	Special woven fabrics; tufted textile fabrics; lace tapestries; trimmings; embroidery	0.26	0.33	0.52	0.64	0.08	0.06	0.08	0.07
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	1.39	1.22	1.86	1.75	0.01	0.00	0.00	0.00
60	Knitted or crocheted fabrics	2.58	1.36	1.54	1.55	0.00	0.01	1.67	0.01
61	Articles of apparel and clothing accessories, knitted or crocheted	0.32	0.73	0.45	0.51	0.44	0.21	0.40	3.29
62	Articles of apparel and clothing accessories, not knitted or crocheted	0.25	0.42	0.98	0.87	0.38	0.60	1.17	1.10
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	1.48	1.67	1.78	1.71	1.43	0.96	0.71	0.75
	Total textile and garments	**31.36**	**40.67**	**35.84**	**77.85**	**3.07**	**6.10**	**7.63**	**10.24**

Source: Department of Customs and Excise, South African Revenue Service
Note: All values are in current values.

Annex 2. Estimated Yarn, Fabric and Garment Exports Possible Under AGOA

Table 36. *Requirements for African yarn under AGOA assuming 0% growth in overall U.S. garment imports*

Year (October 1 to September 30)	Quota %	U.S. imports in prev. year		Quota		Equivalent yarn tonnes ('000)	Equivalent garment pcs. (millions)
		SME billions	$ million	SME millions	*Approx. value $billions		
2000/2001	1.50%	16.4	60.1	246.5	0.9	44.6	170.0
2001/2002	1.78%	16.4	60.1	292.5	1.1	52.9	201.7
2002/2003	2.06%	16.4	60.1	338.5	1.2	61.3	233.5
2003/2004	2.34%	16.4	60.1	384.5	1.4	69.6	265.2
2004/2005	**2.62%**	**16.4**	**60.1**	**430.6**	**1.6**	**77.9**	**296.9**
2005/2006	**2.90%**	**16.4**	**60.1**	**476.6**	**1.7**	**86.3**	**328.7**
2006/2007	**3.18%**	**16.4**	**60.1**	**522.6**	**1.9**	**94.6**	**360.4**
2007/2008	**3.50%**	**16.4**	**60.1**	**575.2**	**2.1**	**104.1**	**396.7**
Total					11.9		

Note: Exact figures are highlighted in grey. All other figures are estimates. The **bold** numbers from 2004 and beyond indicate the period when **all** African countries will have to use African (or U.S.) origin yarn and fabric for garments to qualify for duty-free entry under AGOA. 'Equivalent yarn tonnes' are calculated assuming an average weight of 181 grams per square metre, including waste. 'Equivalent garment pieces' are calculated assuming an average of 1.45 square metre equivalents per garment, which is the average consumption of fabric for all garments produced in SADC in 1999 (See section on The Pipeline).
SME = Square metre equivalents
* The quota for AGOA is only measured in SMEs. We have given an approximate dollar figure for illustration purposes only.

Table 37. *Requirements for African yarn under AGOA assuming 6.4% growth in overall U.S. garment imports*

Year (October 1 to September 30)	Quota %	U.S. imports in prev. year		Quota		Equivalent yarn tonnes ('000)	Equivalent garment pcs. (millions)
		SME billions	$ billions	SME millions	Approx. value ($ billions)		
2000/2001	1.50%	16.4	60.1	246.5	0.9	44.6	170.0
2001/2002	1.78%	17.5	63.9	311.1	1.1	56.3	214.5
2002/2003	2.06%	18.6	68.0	382.9	1.4	69.3	264.1
2003/2004	2.34%	19.8	72.3	462.5	1.7	83.7	319.0
2004/2005	**2.62%**	**21.0**	**76.9**	**550.8**	**2.0**	**99.7**	**379.8**
2005/2006	**2.90%**	**22.4**	**81.8**	**648.3**	**2.4**	**117.4**	**447.1**
2006/2007	**3.18%**	**23.8**	**87.0**	**756.1**	**2.8**	**136.9**	**521.4**
2007/2008	**3.50%**	**25.3**	**92.5**	**885.0**	**3.2**	**160.2**	**610.4**
Total					15.5		

Note: See note for Table 36.

Annex 3. Calculation of investment attractiveness for SADC countries

To evaluate the investment attractiveness of the SADC countries, we used a variety of factors weighted by a subjective evaluation of their relative importance.

- *Currency overvaluation percent*. This equals the parallel rate divided by the bank rate, minus one, and the result is multiplied by 100. The square root of this result subtracted from 10 is multiplied by the weighting factor. A 100% overvaluation would be equal to zero times the weighting factor. A zero percent overvaluation would be 10 times the weighting factor.

- *Time to open company*. This is based on data obtained during the field studies.

  0 = more than three months
  5 = one to three months
  10 = one month or less

- *Work permits*. This refers to difficulties manufacturers reported in obtaining work permits in the field study and is the average of the difficulty on a scale of zero to five (zero = easy, five = very difficult) for all levels of staff. This raw score is subtracted from 5 and multiplied by two, so the best possible raw score (i.e., zero) would have the highest possible contribution (i.e., 10).

- *Tax breaks*. This is an evaluation of the tax incentives the country gives to manufacturing and related service companies.

  0 = Not tax breaks are offered to exporters or manufacturers.
  5 = A reduced tax rate is offered to exporters only.
  8 = A reduced tax rate is offered for both exporters and manufacturers, but not to service companies.
  10 = A reduced tax rate is offered for all manufacturers and related service companies.

- *EPZ scheme*. This is an evaluation of the type of duty-exemption scheme available to exporters.

  0 = no duty exemption scheme for exporters
  3 = duty draw-back scheme
  5 = a well functioning duty suspension scheme
  8 = geographically based export processing zones
  10 = export processing zones, or the equivalent, with no geographical restriction

- *Real interest rate.* Interest rate based on the nominal bank interest rate less the inflation rate, as shown in the country reports.

  0 = real interest rate above 20% per year
  5 = real interest rate between 10 and 20% per year
  10 = real interest rate below 10% per year

- *Capacity Constrained.* The raw scores are the average of the responses of manufacturers in the field study to how constrained they were by short term and long term capital requirements. A response of zero means the manufacturer was not constrained, and a response of three meant that they were seriously constrained. The responses are subtracted from three, and scaled so the total response for both short term and long term capital constraints would total ten, with the score for long term capital being weighted twice that of short term capital.

- *Score.* This is the sum of all the raw scores, scaled as discussed above, and multiplied by the weighting factor.

- *Percent of maximum possible score.* To correct for missing data, the evaluation of each country is expressed as a percent of the maximum possible score the country could obtain for the all the data that is available.

Table 38. *Evaluation of country investment attractiveness*

	Currency overvaluation Percent	Capital constrained		Work permits	Time to open company	Tax breaks	EPZ scheme	Real interest rate	Score	Percent maximum possible score
		Short term	Short term							
Botswana	0	0.2	0.2	1.6	10	10	10	10	317.6	90.7%
Lesotho	0	0	0	3.2	5	10	10	10	266.6	76.2%
Malawi	11.5	2.3	2.3	2.6	n.a	5	10	0	203.2	63.5%
Mauritius	0	0.3	0.3	2.0	5	10	10	10	293.9	84.0%
Mozambique	2	2.6	2.6	4.3	0	8	8	10	183.6	52.5%
Namibia	0	1	1	0.8	10	8	10	10	321.6	91.9%
South Africa	0	1	1	4.9	0	n.a.	10	10	186.2	58.2%
Swaziland	0	2.1	2.1	2.3	10	5	10	10	275.4	78.7%
Tanzania	0	1.4	1.4	2.9	n.a	0	0	5	109.3	34.2%
Zambia	0	5	5	0.5	10	8	3	10	248.7	71.1%
Zimbabwe	82	2.7	2.7	4.0	n.a	n.a	8	5	117.8	40.6%
Factor Weights	*5*	*2*	*2*	*10*	*3*	*3*	*10*	*2*		

Note: The values for the first five columns are the observed values still *not converted* to the one-to-10 index.

Annex 4. AGOA: Opportunities, Conditionalities, Regulations and Marketing

Thomas O'Keefe and Susan Hester[136]

Introduction

The African Growth and Opportunity Act (AGOA) was signed into law by President Bill Clinton in May of 2000. AGOA expands through September 30, 2008, the Generalized System of Preference (GSP) program for eligible sub-Saharan African countries that the United States has had in place since 1974. In particular, AGOA adds an additional 1,900 or so HTS lines to the current GSP list of approximately 4,600 products eligible for duty free entry into the United States. In addition, the United States included certain textile and clothing items as eligible for duty-free treatment under AGOA. Traditionally the textile and clothing sector has been excluded from duty-free access into the United States under preferential market-access programs extended to other parts of the developing world. These preferential market access programs include the Caribbean Basin Economic Recovery Act or CBERA[137], which entered into effect on January 1, 1984, and the Andean Trade Preference Act or ATPA that was signed into law in December 1991 and covers imports from Bolivia, Colombia, Ecuador, and Peru.

On October 4, 2000, the U.S. *Federal Register* published the first list of sub-Saharan African countries that were deemed eligible for participation in AGOA. This first list included all 14 countries of the Southern African Development Community (SADC) but for Angola, the Democratic Republic of Congo, Swaziland, and Zimbabwe. Swaziland was incorporated by a Proclamation issued by outgoing President Clinton on January 17, 2001, after the kingdom quickly amended its labour laws to the satisfaction of the U.S. government. On October 4, 2000, the *Federal Register* also published a list of the sub-Saharan countries deemed to be "lesser developed beneficiary countries" and therefore eligible for more generous benefits with respect to clothing exports to the United States. Of the AGOA-eligible SADC countries, the list included five nations (i.e., Lesotho, Malawi, Mozambique, Tanzania, and Zambia). Swaziland was added to this first list of LDCs by the same Proclamation issued by President Clinton on January 17, 2001, that declared the kingdom AGOA-eligible.

What makes a country eligible to receive the benefits of AGOA supplement those governing GSP eligibility (when they are not, in fact, identical) and are conditioned on, *inter alia*, the establishment of market-based economies, the development of political pluralism and the rule of law, the elimination of barriers to U.S. trade and investment, the protection of

[136] This contribution was made possible by the cooperation of RAPID/USAID. The cooperation is gratefully acknowledged.

[137] Some 22 countries or territories are currently eligible to receive CBERA preferential treatment when exporting to the United States. These countries (or territories) include Antigua, Aruba, The Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. On January 1, 1998, Aruba and the Netherlands Antilles became ineligible for preferential treatment because they were deemed "high income" countries as defined by official World Bank statistics.

intellectual property rights, the adoption of policies to reduce poverty and increase the availability of health care and educational opportunities, engagement in efforts to combat corruption, and the protection of human rights and so-called core worker rights[138] as well as the elimination of certain egregiously abusive examples of child labour as defined by the International Labour Organization.

Sub-Saharan African countries designated as AGOA-eligible must undergo an annual review of their status, and countries may be added or withdrawn during this yearly review. As a word of warning for African countries that fail to take the eligibility requirements under AGOA seriously, preferential access to the U.S. market can be lost (particularly if sufficient political pressure is put on the U.S. government by an influential interest group). For example, in 1998 Honduras was declared CBERA-ineligible for three months when the U.S. government, under a similar annual review requirement for that program, determined the country was failing to adequately enforce its intellectual property laws.

A Presidential Proclamation issued on December 18, 2000 (and published in the *Federal Register* of December 21, 2000) contained the final list of products that AGOA added to the GSP program for duty-free entry into the United States. From that point on, any AGOA-eligible countries has been able to export the approximately 1,900 additional HTS lines duty-free that AGOA added to GSP. Excluded from this automatic privilege, however, are AGOA-eligible textile and clothing products. Before exports of those types of products can commence, a beneficiary country must first have in place a visa system approved by the United States government. To date, of the SADC countries that are AGOA-eligible, the Office of the United States Trade Representative (U.S.T.R.) has only approved the visa systems of Botswana, Lesotho, Malawi, Mauritius, South Africa, and Swaziland. Approval of the visa system in the specific case of Mauritius also meant that the country was no longer subject to the quotas that had been in place for its textile and apparel exports to the United States.

Textile and Clothing Articles Eligible for AGOA Privileges

The textile and clothing articles that are permitted duty-free entry into the United States correspond to one of the nine preference groups which must be noted in the visa that is stamped on all commercial invoices and requisite certificate of origin reflecting AGOA-eligible textile and clothing exports. In most cases, the preference group will also reveal the particular rule of origin that is required for that particular product. With one exception, these preference groupings are exclusively for clothing. Only the last grouping designated (I) or 9: "Hand Loomed, Handmade, or Folklore Items" can encompass both textiles and clothing.

The remaining eight preference groups for clothing include: (A) clothing assembled in one or more AGOA beneficiary countries from U.S.-formed and cut fabric which, in turn, is made from U.S. yarn[139]; (B) clothing assembled and further processed[140] in one or more AGOA beneficiary countries from U.S.-formed and cut fabric which, in turn, is made from U.S. yarn[141]; (C) clothing cut and assembled using U.S.-made thread in one or more AGOA

[138]These core labour rights include the right of association, the right to organize and bargain collectively, freedom from compulsory labour, a minimum age for the employment of children, and acceptable conditions of work with respect to minimum wages, hours of work, and occupational health and safety.

[139]Includes fabrics not formed from yarns if those fabrics are classifiable under HTSUS headings 5602 or 5603 and are wholly formed and cut in the United States.

[140] Further processing includes embroidery, stone-washing, enzyme-washing, acid washing, perma-pressing, oven-baking, bleaching, garment-dyeing, screen printing, or other similar processes.

[141]Includes fabrics not formed from yarns if those fabrics are classifiable under HTSUS headings 5602 or 5603 and are *wholly formed **and cut*** in the *United States.*

beneficiary countries from U.S. made fabric which, in turn, is made from U.S. yarn[142]; (D) clothing assembled from fabric made in one or more AGOA beneficiary countries which, in turn, is made from yarn spun in either the U.S. or one or more AGOA beneficiary countries[143]; (E) clothing assembled in one or more AGOA beneficiary countries that have been specifically designated as "lesser developed beneficiary countries" regardless of the source of the fabric, yarn, and/or thread; (F) sweaters knit-to-shape in one or more AGOA beneficiary countries whose chief weight is made up of cashmere sourced anywhere in the world; (G) sweaters knit-to-shape in one or more AGOA beneficiary countries whose weight is made up of 50% or more of wool yarn measuring 18.5 microns in diameter or finer and sourced anywhere in the world[144]; and, (H) clothing cut and assembled (or knit-to-shape) in one or more AGOA beneficiary countries from third country fabrics or yarn (i.e., not from the U.S. or from AGOA countries) that have been designated as not available in commercial quantities in the United States.

As can be gathered from the above discussion, the rules of origin for clothing in preference groups (A) through (D) constitute a **triple** substantial transformation rule.[145] On the other hand, clothing in preference group (E) is the exception granted to least developed AGOA beneficiary countries through September 30, 2004 and amounts to a single substantial transformation rule. This latter rule means that the six AGOA-eligible SADC countries that have been designated as LDCs (i.e., Lesotho, Malawi, Mozambique, Swaziland, Tanzania, and Zambia) can make clothing from fabric imported from anywhere in the world and can, once their visa systems are approved, export that clothing duty-free to the United States. Accordingly, even though Zimbabwe is not yet an AGOA beneficiary country, Zimbabwean cotton, yarn, and even fabric can be used to make clothing in one or more of these LDC countries.[146] In addition, Zimbabwean fabrics or yarns not available in commercial quantities in the United States could conceivably also be used to make clothing in any AGOA beneficiary country under preference group (H). At the present time, the U.S. Department of Commerce has designated certain HTS headings of cotton velveteen, corduroy fabrics, and batiste as in short supply in the United States. Zimbabwe could also theoretically supply AGOA-eligible countries with cashmere or very fine wool to make sweaters.

Overall the rules of origin for the textile and clothing sector in SADC and AGOA are fairly compatible, albeit more complex in the case of AGOA. Both SADC and AGOA provide for a temporary single substantial transformation rule for less developed countries (to end on 30 September 2004 for AGOA and in 2005 for SADC). The general SADC rule of origin for textiles and clothing is a *double* substantial transformation rule, whereas the general AGOA rule for eligible clothing is equivalent to a triple substantial transformation rule. In addition, there are specific fabric-cutting obligations under AGOA that do not exist in SADC as well as requirements that certain clothing assembled in AGOA countries may be required to use U.S. thread.[147]

---

[142]Includes fabrics not formed from yarns if those fabrics are classifiable under HTSUS headings 5602 or 5603 and are *wholly formed* in the *United States*.

[143]Includes fabrics not formed from yarns if those fabrics are classifiable under HTSUS headings 5602 or 5603 and are *wholly formed and cut* in one or more beneficiary *sub-Saharan African countries*.

[144]Despite the fact that the heading in the Act for this provision specifically mentioned "merino wool", U.S. Customs interprets the statutory language as reflecting the intent of Congress to set a maximum (18.5 micron) diameter limitation without regard to the type of animal from which the wool was obtained.

[145] Though the fibre may come from anywhere, the yarn-forward rule requires three transformations: fibre to yarn, yarn to fabric, and fabric to apparel.

[146]Clothing made in an LDC must be "wholly assembled" in one or more LDC. The U.S. Customs has interpreted this to include the cutting of the third country fabric in the LDC and not simply sewing operations.

[147] If U.S.-origin fabric is used and the fabric is cut in a beneficiary sub-Saharan African country, the garment must be assembled with U.S. origin sewing thread (AGOA section 112 paragraph b-2.). If the garment

In February 2001, it was widely reported in the press throughout southern Africa that a shipment of wool sweaters made in Mauritius had not been afforded AGOA duty-free entry into the United States.[148] The position of U.S. Customs was that the Mauritian sweaters were not apparel since the knit-to-shape panels from which the sweaters were assembled are not fabric. Nor were the sweaters in chief weight cashmere or made with the specified width of wool. In addition, they were not made from a third-country yarn listed as in short supply in the United States. Accordingly, they did not fall under one of the nine AGOA textile and apparel preference groupings and were therefore levied the corresponding Normal Trade Relation (N.T.R.) tariff. Members of Congress involved in the AGOA legislative drafting process as well as the Office of the U.S.T.R. objected to the interpretation made by U.S. Customs, arguing that it was the legislators' intent to include sweaters as eligible for duty-free access into the United States. U.S. Customs, for its part, has countered by stating that its interpretation is in keeping with past U.S. practice. Any special exception made for AGOA would undermine past rulings made with respect to imports of sweaters from other parts of the world.

Visa Verification System

As previously emphasized, no AGOA beneficiary country may export any textile or clothing duty-free to the United States until it has adopted an effective visa system that has been approved by the Office of the U.S.T.R. In addition, the Office of the U.S.T.R. must find that a beneficiary country has implemented and follows (or be making substantial progress towards these two goals) certain customs procedures that will assist U.S. Customs in verifying the origin of the textiles and clothing. The visa system certifies that textile and clothing products claiming benefits under AGOA were produced in a beneficiary country. To date, of the 11 AGOA-eligible SADC countries, the U.S. government has only approved the visa systems and related customs procedures of Botswana, Lesotho, Malawi, Mauritius, South Africa, and Swaziland. Hence, only eligible clothing assembled in one or more of these six countries and complying with AGOA's rules of origin can currently be exported duty-free to the United States.

At first glance, it would seem more logical that the continued failure to implement a U.S. approved visa verification system and related customs procedures should not prevent the other AGOA-eligible SADC countries from supplying clothing manufacturers in Mauritius and South Africa with fibre, yarn, or even fabric that is used to make garments that are subsequently exported duty-free to the United States. Unfortunately, except for the non-problematic supplying of fibre, this issue has yet to be resolved by the United States government. Accordingly, at present, it is not possible for other SADC countries to supply Mauritius and South Africa with any yarn and/or fabric as inputs to garments that can be exported duty-free to the United States, if **they** themselves do **not have** an **approved visa verification system** in place. By contrast, they may supply clothing manufacturers in Lesotho and Swaziland at least through September 30, 2004 (when the yarn- and fabric-sourcing exception for least developed countries expires).

Although there is no single standard for the visa system and related customs procedures that must be adopted by all AGOA beneficiary countries, among the customs-related obligations that must be included as part of an overall package are, *inter alia*, the adoption of

---

is made from U.S. fabric that is cut in the U.S., there is no requirement to use U.S.-origin sewing thread (AGOA section 112 paragraph b-1). There is also no requirement to use U.S. thread if the garment is made from fabric and yarn *sourced* and *cut* in the AGOA eligible countries, or through September 30, 2004, if a garment cut in an AGOA-eligible LDC from fabric sourced anywhere in the world.

[148] See, e.g., Barber (2001) and Wadula (2001).

domestic laws and enforcement procedures designed to prevent unlawful trans-shipment and the use of counterfeit documents, the enactment of legislation that would permit U.S. Customs to make on site investigations to investigate allegations of trans-shipment (including verification visits to factories, producers, exporters and/or manufacturers), passage of legislation that requires all domestic producers and exporters to maintain production and export records for a period covering up to five years, and an agreement with the U.S. government to timely supply its Customs Service with the documentation that was used to support issuance of a visa such as production records, information relating to the place of production, the number and identification of the types of machinery used in production, the number of employees, and certifications received from both the manufacturer and the exporter.

If the U.S. Customs Service actually visits the facility of a producer or exporter in an AGOA beneficiary country (and the Act itself calls for verification teams from U.S. Customs to visit at least four countries a year) it may also expect to see:

- inventory records;
- documentation for payment of raw material purchases;
- export and shipping records;
- agreements with subcontractors;
- payroll records;
- cutting records;
- assembly records;
- letters of credit; and,
- out-processing records

Requirements for the Actual Visa

Any shipment of eligible textiles or clothing from an AGOA beneficiary country (if it is to receive U.S. preferential market access treatment) is required to have an original visa in blue ink only stamped onto the front of the original commercial invoice reflecting that particular shipment. The country of origin of the textile or clothing issues the visa. In those cases where an item is not completely produced or manufactured in one country, U.S. Customs generally deems the country of origin to be where the inputs to make the textile or garment were wholly assembled. Alternatively, when this cannot be ascertained, origin is in the country where the most important assembly or the most important manufacturing process took place. When even this information cannot be accurately determined, then the third alternative is for origin to be based on the last country where an important assembly or manufacturing process took place.

Each visa stamp must contain the following information:

- a visa number in nine digit-letter format beginning with the numeric digit ranging from 1 through 9 that is the equivalent in ranking to one of the nine preference groupings (i.e., A-H) used to designate AGOA eligible textile and clothing articles; followed by the two-character alpha code specified by the International Organization for Standardization (ISO) for the designated sub-Saharan African country; followed by a six-digit numerical serial number identifying the shipment;

- the date of issuance (i.e., the day, month, and year on which the visa was signed by an authorized government official);

- the correct AGOA grouping for the particular textile or apparel item, the total quantity, and the unit of quantity in the shipment; and,

- the original signature of an authorized official of the AGOA beneficiary country or his/her designate.

Certification Procedure for Hand-loomed, Handmade and Folkloric Products

Before anyone from an AGOA eligible country can begin exporting items that are deemed to be hand loomed, handmade, and/or folkloric (i.e., the products that fall under preference group (I)), their government must first have implemented a procedure for certifying that these items are indeed what they claim to be. In addition, the government in question must consult with the U.S. government as to the products it desires to include in this category, and the U.S. government must approve this selection. One thing U.S. Customs has already made clear is that any product falling under this preference grouping must be produced in a manner that has been in existence for a long period of time (i.e., centuries). In addition, any patterns incorporated into hand loomed, handmade, and/or folkloric items must also be traditional ones that have a long history of local use. Accordingly, traditional African baskets made by modern machinery would not be acceptable. Equally unacceptable would be textiles made with traditional handlooms but incorporating Walt Disney characters, for example, into their design patterns.

Of the nine AGOA preference groupings for textiles and clothing, preference group (I) is the only one that can conceivably be used to export textiles as well as dothing to the United States duty-free. The other eight groupings are, by definition, limited to clothing. Furthermore, one or more AGOA beneficiary countries can be involved in the production of hand loomed, handmade, and folkloric articles. Presumably each country participating in the chain of production would have to have a certification procedure in place, although this would not be true if a country is simply supplying raw materials. In any event, the lack of clarity on this issue in the Act itself is something that can be taken up and resolved during the required consultation process between the interested sub-Saharan African government(s) and the United States.

To date, no AGOA-eligible SADC country has consulted with and received approval from the United States as to what products it wants to include as hand loomed, hand made, or folkloric. In addition, none of these countries have implemented any domestic procedure for certifying hand loomed, handmade or folkloric items.

Cap Limitation on Certain Apparel Exports

Any garments exported to the United States under either preference grouping (D) (i.e., clothing assembled from fabric made in one or more AGOA beneficiary countries which, in turn, is made from yarn spun in either the U.S. or one or more AGOA beneficiary countries), or (E) (i.e., clothing assembled in one or more AGOA beneficiary countries that have been specifically designated as "lesser developed beneficiary countries" regardless of the source of the fabric, yarn, and/or thread) are subject to a so-called cap. Any imports from AGOA beneficiary countries that exceed the cap for the specified period will not be excluded from the United States, but will simply be charged the corresponding N.T.R. duty.

The cap is based on a percentage of the total U.S. clothing imports during the previous 12-month period. The cap, which is applicable to all the AGOA beneficiary countries as a group and is filled on a "first come, first served" basis, has been set at the following percentages:

October 1, 2000-September 20, 2001	1.50%
October 1, 2001-September 30, 2002	1.78%
October 1, 2002-September 30, 2003	2.06%
October 1, 2003-September 30, 2004	2.34%
October 1, 2004-September 30, 2005	2.62%
October 1, 2005-September 30, 2006	2.90%
October 1, 2006-September 30, 2007	3.18%
October 1, 2007-September 30, 2008	3.50%

The fact that the cap system is cumulative for the entire region has raised concerns that a few AGOA-eligible countries may quickly fill it and thereby deny the others duty-free access into the U.S. market. This concern was heightened by the fact that, until April 23, 2001, the visa systems of only four AGOA-eligible countries had been approved, and these four countries (i.e., Kenya, Madagascar, Mauritius, and the South Africa) had traditionally been responsible for the bulk of sub-Saharan African clothing exports to the United States. In a March 2001 interview, Rosa M. Whitaker, Assistant U.S. Trade Representative for Africa, tried to downplay that concern by pointing out that not only do the cap percentages increase every year, but also they are multiplied against actual U.S. apparel imports for the preceding year.[149] Current U.S. apparel imports total approximately $70 billion a year and this is projected to grow to $180 billion over the next five years. Accordingly, Ms. Whitaker does not foresee the entire sub-Saharan region ever exceeding the cap let alone small groups of countries such as Kenya and Mauritius. Even so, Ms. Whitaker is a big proponent of efforts to revise parts of the current Act through an AGOA II that would, among other things, eliminate the cap. She advocates such a move because the current ceilings probably have a negative psychological impact on the U.S. business community who feel that their sourcing options in Africa are restricted (however unrealistic that perception).

In terms of any effort to extend the deadline for clothing made with third-country fabric in lesser developed countries beyond the current September 30, 2004 deadline, legislative staff from the House Ways and Means Committee (responsible for drafting the original AGOA and any future revisions to it) as well as Rosa Whitaker have expressed doubt as to whether this is feasible. The thought is that a window of opportunity is being provided for lesser-developed countries to begin finding sources of yarn and/or fabric in either the United States or in AGOA-eligible countries. U.S. policy is also to encourage less developed AGOA-eligible countries to focus on those aspects of a regionally integrated and internationally competitive textile and apparel industry in which they enjoy a comparative advantage. The United States does not have any interest in relegating the less developed countries to a role in the production chain where only their cheap labour is used to cut and assemble fabric produced elsewhere in the world.

How AGOA Encourages Female-Owned Business

Given that a majority of the workers employed in the clothing industry in sub-Saharan Africa are already women, the preferential access that AGOA affords to this particular sector into the U.S. market is likely to have a disproportionate positive impact on female employment opportunities. Furthermore, preference group (I) of AGOA for hand loomed, handmade, and folkloric textile and apparel products will likely have a disproportionately greater beneficial

[149]interview with Rosa M. Whitaker, Assistant U.S. Trade Representative for Africa, at the Office of the U.S. Trade Representative in Washington, D.C., March 14, 2001

impact on female-owned businesses and cooperative endeavours given that this is an activity that has been traditionally been dominated by women in most African societies.

Why AGOA Can Complement Efforts to Create a SADC Free Trade Area

An important goal of AGOA is to promote efforts at sub-regional economic integration in Africa by allowing beneficiary countries duty-free access into the United States for textile and clothing products using inputs from throughout the AGOA region. In the specific case of AGOA-eligible SADC countries, inputs to make textiles and clothing can potentially be sourced from within SADC. In the case of clothing exported to the United States, both the yarn and fabric can be sourced from fellow SADC countries that are also deemed AGOA eligible and (at least for the time being) have a visa system in place. Even SADC countries like Zimbabwe that are currently AGOA-ineligible, can supply AGOA-eligible SADC members with the fibre that is spun into yarn. In addition, until September 30, 2004, AGOA-ineligible countries like Zimbabwe can also be the source of the yarn and/or fabric that the lesser developed AGOA beneficiary countries use to make clothing for duty-free export to the United States. Furthermore, nothing prevents a non-AGOA eligible SADC country like Zimbabwe from being the source of yarn and fibre to make in chief weight cashmere or certain types of wool sweaters, or to supply AGOA beneficiaries with yarn and fabric deemed to be in short supply in the United States.

Overall the rules of origin for the textile and clothing sector in SADC and AGOA are fairly compatible, albeit more complex in the case of AGOA. Both SADC and AGOA provide for a temporary single substantial transformation rule for less developed countries (to end on September 30, 2004 in the case of AGOA and in 2005 in the case of SADC). The general SADC rule of origin for textiles and clothing is a **double** substantial transformation rule. The general AGOA rule for eligible clothing amounts, in essence, to a **triple** substantial transformation rule. In addition, there are specific fabric-cutting obligations under AGOA that do not exist in SADC as well as requirements that certain clothing assembled in AGOA countries may be required to use U.S. thread.

The above discussion makes clear that SADC can be used to create a seamless and vertically integrated textile and clothing industry whose output is imported into the United States duty-free under AGOA. Ideally, different member states can focus on that part of the production chain where they enjoy the greatest comparative advantage. Overall the regional textile and apparel industry would become even more efficient and internationally competitive as a result of the new economies of scale that would be created. Whether this scenario becomes a reality, however, depends upon SADC becoming a genuine free trade area. To date the negotiations to create a SADC free trade area have been very disappointing in this regard. In particular, the SACU block led by South Africa appears reluctant to open up both its textile and apparel markets to free trade from the other countries negotiating the SADC Protocol on Trade. This resistance can also be seen on the part of the other SADC countries that seek greater access to the SACU markets but refuse to reciprocate. Sadly, the SADC region appears to lack the requisite visionary leadership needed to carry out a restructuring of the region's textile and clothing industries, and to sustain it in the face of the backlash that this restructuring will produce as a result of inevitable short-term dislocations.

U.S. Unfair Trade Practice Remedies and Other Non-Tariff Barriers

One of the important advantages provided under AGOA is that eligible exports are not subject to either the GSP competitive-need and country income restrictions. Products that achieve a specified level of imports into the U.S. market (i.e., either exceed a specific

annually adjusted value in absolute terms or 50% of the value of total U.S. imports of the product in the preceding calendar year) are deemed to have exceeded the competitive need limit and may be excluded from GSP eligibility. In addition, countries may lose all GSP privileges once their national income grows to exceed a specified amount (in the late 1990's, the maximum ceiling that could not be exceeded in a given year was the sum of U.S.$8, 500.00 multiplied by a percentage calculated from the U.S. GNP for that year over the U.S. GNP for a pre-determined base year). When a country does become particularly successful and manages to dominate U.S. imports of a certain product, the absence of competitive need limitations becomes an extremely useful benefit.[150]

Another important advantage of AGOA over GSP is that it guarantees uninterrupted duty-free access into the U.S. market for at least the currently authorized eight years it is in existence. This is a significant benefit given that since 1995, the GSP program has lapsed a number of times, including for periods exceeding several months. During these lapses, importers have been forced to pay N.T.R. duties, until Congress has restored GSP retro-actively and they have been allowed to apply for refunds.[151] The uncertainty as to whether GSP will be renewed and additional expenses incurred during the time GSP has lapsed, undermines the attractiveness of sourcing imports from beneficiary countries and gives a big advantage to AGOA-sourced products.

Despite the elimination of restrictive practices found in the GSP that AGOA exporters are exempt from, eligibility of products for duty-free entry into the United States under AGOA does not preclude the U.S. government from imposing anti-dumping or countervailing duties to combat alleged unfair trade practices. This is not a threat to be taken lightly given that, in the past, the U.S. has imposed compensatory tariffs on imports of certain flowers from Colombia, Ecuador, and Peru that otherwise qualified for duty-free entry under ATPA. The duties were imposed in response to actions filed by U.S. flower groups alleging that flowers from those three Andean were being sold in the United States below production costs and/or exports were receiving government subsidies.

Perhaps of greater concern to textile and clothing exporters from the AGOA countries than general U.S. unfair trade practice remedies, should be the special safeguard provision included within the Act itself. This special safeguard measure applies to sub-Saharan African apparel exports that fall under preference groupings (D) (i.e., clothing assembled from fabric made in one or more AGOA beneficiary countries which, in turn, is made from yarn spun in either the U.S. or one or more AGOA beneficiary countries) and (E) (i.e., clothing assembled in one or more AGOA beneficiary countries that have been specifically designated as "lesser developed beneficiary countries" regardless of the source of the fabric, yarn, and/or thread). Section 112 (b)(3)(C)(i) of AGOA requires that the Secretary of Commerce monitor imports under preference groupings (D) and (E) on a monthly basis to ascertain if there has been a surge in imports of such clothing from a particular country. If the Secretary of Commerce

[150]The fact that items admitted under ATPA are not subject to the competitive-need limit, for example, has proven particularly beneficial for the Andean countries in terms of exports that have expanded tremendously as a result of ATPA. For instance, in 1997, Peru's exports of refined copper cathodes exceeded the GSP competitive need limit and Peru lost GSP eligibility for this item. However, Peruvian copper cathodes continued to enter the U.S. market duty-free under ATPA. Similarly, Colombian fresh-cut chrysanthemums would not be able to enter the U.S. market duty-free were it not for ATPA, given that the country regularly exceeds the GSP competitive-need limits. The same thing happened to Peru in 1998 with respect to fresh or chilled asparagus.

[151]GSP expired on July 31, 1995 and was not renewed for more than a year until October 1, 1996, retroactive to August 1, 1995 through May 31, 1997. The program expired again on May 31, 1997, but was renewed August 5, 1997, retroactive to June 1, 1997 through June 30, 1998. After GSP expired at the end of June in 1998 it was not renewed until October 21, 1998, retroactive to July 1, 1998 through June 30, 1999. Most recently, GSP expired on June 30, 1999, but was renewed more than half a year later on December 17, 1999, retroactive to July 1, 1999 and continuing through September 30, 2001.

finds that there has been a surge, Section 112 (b)(3)(C)(ii) then obligates him or her to determine whether such clothing "is being imported in such increased quantities as to cause serious damage, or threat thereof, to the domestic [i.e., U.S.] industry producing a like or directly competitive article." An "interested party"[152] may also request that the Secretary of Commerce make such a determination at any time. If a finding of serious damage or of a threat of serious damage is made, the U.S. can suspend duty-free entry of that particular garment.

Strong Competition Sub-Saharan Africa Can Expect in the U.S. Textile and Clothing Market

The passage by the U.S. Congress of the U.S.-Caribbean Basin Trade Partnership Act in conjunction with AGOA in January of 2000 extended duty-free entry into the United States of previously excluded textile and apparel articles.[153] The Act is designed to offer eligible Caribbean Basin countries the same type of duty and quota-free market access for textiles and apparel into the United States that Mexico received under the North American Free Trade Agreement or NAFTA. This is a temporary benefit that will expire whenever the Free Trade Area of the Americas (i.e., the FTAA) comes into effect or on September 30, 2008 (whichever comes first).

Even prior to passage of the U.S.-Caribbean Basin Trade Partnership Act, many CBERA beneficiary countries were already allowed to ship back to the United States clothing assembled from fabric formed and/or cut in the United States under liberal duty or quota requirements. In particular, imports of clothing and other made-up textile articles (including footwear) assembled from either U.S. or foreign components cut-to-shape in the United States and initially exported from the U.S. ready for assembly, were eligible for reduced duties upon re-entry into the U.S. in their final form under HTS heading 9802.00.80. In addition, garments assembled in participating CBERA countries from fabrics wholly formed and cut in the United States could enter the U.S. under preferential quotas known as guaranteed access levels (GALS) that provide virtually unlimited U.S. market access. A duty was only charged on the value-added performed abroad (i.e., the sewing), which also tends to be the most labour-intensive stage of production.

The two pre-existing production sharing arrangements described above, coupled with passage of the recent U.S.-Caribbean Basin Trade Partnership Act as well as the 1994 North American Free Trade Agreement (NAFTA), have provided garment manufacturers from the

[152]The term "interested party" is defined by Section 112(b)(3)(C)(v) of the Act to include "any producer of a like or directly competitive article, a certified union or recognized union or group of workers which is representative of an industry engaged in the manufacture, production, or sale in the United States of a like or directly competitive article, a trade or business association representing producers or sellers of like or directly competitive articles" as well as these same categories of parties engaged in the production of essential inputs for like or directly competitive articles.

[153]Under the U.S.-Caribbean Basin Trade Partnership Act, duty-free treatment was extended to clothing assembled in one or more eligible CBERA countries from fabric wholly formed and cut in the United States which, in turn, is made from yarns wholly formed in the United States and that enter under HTS subheading 9802.00.80 or, in special circumstances, under HTS Chapters 61 or 62. In addition, also now subject to duty-free entry into the United States is clothing cut in one or more eligible CBERA countries from fabric wholly formed in the United States which, in turn is made from yarn wholly formed in the United States (including certain fabrics not formed from yarns) if such clothing is also assembled in one or more CBERA countries with thread formed in the United States. Duty-free treatment is also provided for some knit-to-shape and knit apparel articles as well as apparel classifiable under HTS subheading 6212.10 within defined quota limits, and textile luggage. As is also true under AGOA, eligible CBERA countries are allowed to produce clothing from third-country fabrics or yarn deemed to be in short supply in the United States, and there is also a special rule for hand loomed, handmade, or folklore items as well.

CBERA countries and Mexico a considerable head start in accessing the U.S. market. This is in addition to the advantage CBERA and Mexican manufacturers enjoy over African competitors as a result of their closer proximity to the U.S., thereby providing U.S. firms with greater management control over production and quicker turn around times. Furthermore, freight charges from the Caribbean Basin and Mexico to the U.S. are noticeably less in real unit terms over those from Africa, and shipping time from the Caribbean Basin and Mexico to the United States is measured in days and not weeks as compared to Africa (or even months in the case of some land-locked countries).

Possible Strategies for Identifying Promising Clothing Categories for Export to the U.S. Market

Short-Term Strategies

AGOA provides SADC countries with a near-term advantage over major producing countries that are limited by quotas negotiated under the Multi-Fibre Agreement (M.F.A.) and, since 1995, the WTO Agreement on Textiles and Clothing (ATC). Until December 31, 2004, the quota-free access provides SADC countries with special entrée to the U.S. market and serves as an incentive for foreign investment by countries whose access is limited by quotas. During this period, the clothing categories that are the largest and most frequently filled would appear to hold the most potential for success. Countries wishing to export more clothing in these categories may find investing in AGOA eligible countries attractive. These categories include such garments as knit shirts, woven shirts, trousers, and shorts.

These basic garments are the first clothing items typically exported by new suppliers to the United States. In recent decades, retailers and importers have been forced to constantly search out new suppliers not subject to quota limits as soon as their established sources of supply push up against quota levels. Eventually the exports of the new suppliers become subject to quotas, and the search begins all over again. In the case of AGOA, the threat of quotas is absent, and hence the opportunity for investment and a continuing growth in exports exists for the beneficiary countries.

An examination of exports to the United States prior to the enactment of AGOA suggests that this pattern existed in many of the SADC countries. For example, the largest clothing categories exported by South Africa in 2000 were knit shirts, trousers, and woven shirts. Zimbabwe, Mauritius, and Botswana's largest categories were trousers; Swaziland and Lesotho's largest categories were knit shirts. These garment types have provided the entrée to the U.S. market for generations of exporters; learning to successfully manufacture and market these garments are clearly important steps on the export learning curve.

SADC countries can best master the learning curve by concentrating on these basic clothing items that are not generally subject to seasonal demand. It is not surprising that GAP is the largest U.S. customer currently sourcing from sub-Saharan African countries as GAP sells many of its apparel items such as jeans, pants, and basic knit and woven shirts year-round.

On January 1, 2005, when the ATC terminates and textile and clothing products are fully integrated into the W.T.O., quotas will no longer restrict the major exporters, and SADC countries will find themselves in head-to-head competition with such exporting giants as Mexico, China, Bangladesh, Taiwan, and Hong Kong. AGOA will, however, still provide SADC countries with tariff-free access, a benefit not shared by traditional suppliers to the U.S. market. This benefit will make a difference only if the productivity and quality of SADC manufacturers are comparable or nearly comparable to that of manufacturers in competing countries. SADC countries have less than four years to establish themselves as reliable

suppliers and to provide U.S. importers with a reason to source from them over their traditional suppliers. This is a formidable challenge by any measure.

Long-Term Strategies

Companies that hope to be successful in the long run will need to prepare themselves for the phase out of the ATC. and the possible end of AGOA and its special benefits after September 30, 2008. Potentially successful companies will master the learning curve for basic garments quickly and use their knowledge and skill to develop a business and marketing plan that will extend for more than eight years.

Numerous possible alternative paths can lead to success in the export market. For example, while the greatest demand in the U.S. market is for cotton trousers (including jeans), the greatest value added is found in pants made of other fibres such as silk and linen (both currently in the short supply category in the U.S. market). Likewise cotton sweaters and knit shirts are basic items that could be exchanged for garments made of unique and/or highly valued yarns.

The large U.S. retailers are understandably the most well known and are, therefore, the most desired customers. These retailers require a scale of manufacturing and support (such as just-in-time deliveries) that is feasible for few African manufacturers. However, there may be much better matches for African clothing manufacturers among the medium- and small-size U.S. retailers. These retailers supply lucrative niche markets in the United States and may well appreciate the specialty fabrics and designs provided by companies in Africa (Biggs *et al*. 1994:12-33).

Ultimate success will depend on a number of factors. In the first instance, African manufacturers must be able to offer a quality product produced in a timely manner by an efficient, educated, and well-trained workforce. Knowledge and understanding of the export market is the second prerequisite for long-term success. The most direct route to this intelligence is a partnership with an American retailer, designer, importer, or agent. In any event, success in apparel manufacturing is a continuing challenge as consumer tastes change and fashion evolves. AGOA provides entrepreneurs in SADC countries with an open door; but their success will be determined by what they do after they walk through that door.

Final Thoughts

One thing that the SADC countries as a region may want to consider as an aid to increasing textile and clothing exports to the United States and encouraging greater foreign investment in this sector at home is to borrow an example provided by the MERCOSUR countries. As part of an initiative pushed by the private sector, the governments of the four MERCOSUR region have decided to promote their exports abroad jointly under a "Made in MERCOSUR" label and have decided to, *inter alia*, jointly sponsor booths at trade fairs and set up regional trade and investment promotion offices in key North American and European cities. The embassies of the four member states also coordinate efforts at aggressively promoting the region's exports in the local media. Perhaps the SADC countries could partially imitate this effort by pooling scarce resources to promote the entire SADC region's exports in the U.S. market and set up a small but professionally staffed and aggressive SADC Trade and Investment Promotion Centre. The centre could serve as a clearinghouse of information for potential investors to the region. At the same time the centre could serve as a useful middleman between SADC-based exporters and potential U.S. customers looking for new sourcing opportunities. An ideal location to set up such an office would be in New York City, the fashion capital of the United States and the location of most of the clothing buyers for the major U.S. retail outlets. Ideally, such a Promotion Centre would serve as a supplement and

not as a substitute for the independent efforts embassy staff from the SADC countries should be doing to promote trade and investment links between their home countries and the United States.

Finally, an important precedent that should not be forgotten by governments from sub-Saharan Africa is that CBERA was initially set to expire on September 30, 1995. The Caribbean Basin Economic Recovery Expansion Act of 1990, however, made CBERA benefits permanent and expanded those benefits in several ways as well. Accordingly, if AGOA does produce positive results by expanding exports from sub-Saharan Africa to the United States and increasing U.S. investment in the region, there is no reason why the program could not be extended beyond the current cut-off date of September 30, 2008. In fact, the drafters of AGOA initially desired to have the benefits in effect for a 10-year period, but were forced by the Revenue Reconciliation Act to scale it back to eight years.

References

AAMA (American Apparel Manufacturers Association). 1998. *Focus, An Economic Profile of the Apparel Industry*. Arlington, Virginia: AAMA.

Anson, R. and Simpson, P. 2001. World textile and apparel and production trends. *Textile Outlook International* (March).

Barber, S. 2001. African clothes not duty-free in U.S.: Hitch in U.S.-Africa Trade Act is seen as blunder in the drafting of the law, and has sent tremors through S.A. textile and clothing sector. *Business Day*, February 15.

Biggs, T. et al. 1994. *Africa can compete! Export Opportunities and challenges in garments and home products in the U.S. market*. World Bank, Regional Program on Enterprise Development, discussion paper 242.

Biggs, T. et al. 1996. *Africa can compete! Export Opportunities and challenges in garments and home products in the European market.* World Bank, Regional Program on Enterprise Development, discussion paper 300.

Biggs, T.; Nassir, J.; and Fishman, R. 1999. Structure and performance of manufacturing in Mozambique. Report for the Regional Programme on Enterprise Development, World Bank.

Bigsten, A. *et al.* 2000. Credit constraints in manufacturing enterprises in Africa. Centre for the Study of African Economies, working paper 2000.24.

BMCI (Botswana Ministry of Commerce and Industry) 2000. *Botswana Review of Commerce and Industry-Millennium*, 20th ed. Gaborone. B & T Directories (PTY) Ltd.

Bureau Technique de Conseillers Industriels. 1989. SADCC intra-regional textile study. Final report.

Cline, W. 1990. *The Future of World Trade in Textiles and Apparel*. Institute for International Economics, Washington, D.C.

Collier, P. 1997. Globalization: What should be the African policy response? Mimeo. Centre for the Study of African Economies, University of Oxford, U.K.

E.U. Commission. 1999. *Economic and trade cooperation, Synthesis of the studies of the impact of the EU's REPA proposal on ACP*. Staff working paper for Negotiation Group 3.

Cotton Board. 2001. Sub-Saharan Africa. Special Report of *Cotton Import Update*. Memphis: Cotton Board and Cotton Incorporated. March.

Coughlin, P. 2000. A indústria de confecção de roupa em Moçambique: Capacidade, constrangimentos, oportunidades e riscos. Report for the Ministry of Industry and Commerce, Maputo.

Coughlin, P. 2001. SADC study of the textile and garment industries: Mozambique. Report for the Southern African Development Community.

Coughlin, P. et al. 2001. SADC study of the textile and garment industries: Zimbabwe. Report for the Southern African Development Community.

Coughlin, P. and Mworia, T. 2001. SADC study of the textile and garment industries: Tanzania. Report for the Southern African Development Community.

Coughlin, P. and Undenge, S. 2001. SADC study of the textile and garment industries: Malawi. Report for the Southern African Development Community.

Dickerson, K. 1995. *Textiles and Apparel in the Global Economy*, 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall.

Dunlop, A. et al. 1999. *A Stitch in Time.* Oxford University Press.

DuMont, S. 1997. Achieving global competitiveness for manufacturing consumer products in Central and Eastern Europe. Report prepared for the World Economic Forum.

Easterly, W. and Levine, R. 1997. Africa's growth tragedy: Policies and ethnic divisions. *Quarterly Journal of Economics* 112(4).

Economic Strategy Institute. 1998. *Sub-Saharan Africa and the U.S Textile Industry*.

European Commission. 2001. EU approves 'Everything But Arms' trade access for least developed countries. Press Release.

Flatters, F. 2001. The SADC Trade Protocol: Impacts, issues and the way ahead. Paper for the SADC Trade Protocol Project financed by USAID.

Gagnon, J. 1993. Exchange rate variability and the level of international trade. *Journal of International Economics.*

Gherzi. 2000. Report of a sectorial study of the textile and garment industry of Mauritius and the designing of a blueprint to boost exports. Draft report prepared for the Ministry of Commerce, Industry and International Trade.

Grobar, L. 1993. The effect of real exchange rate uncertainty on LDC manufactured exports. *Journal of Development Economics* 41.

Harrold, P.; Jayawickrama, M.; and Bhattasali, D. 1996. Practical lessons for Africa from East Asia in industrial and trade policies. World Bank Discussion Paper 310.

Hyvarinen, A. 2001. Implications of the introduction of the Agreement of Textiles and Clothing (ATC) on the african textiles and clothing sector. ITC/UNCTAD paper.

Harvey, C. 1999. Macroeconomic policy and trade integration in southern Africa. Paper presented at the Industrial Strategy Project Regional Research Workshop, Irene, South Africa.

Hors, I. 2001. Fighting corruption in customs administration: What can we learn from recent experiences? OECD Development Centre, technical paper 175. www.oecd.org/dev/ publication/tp1a.htm.

House, K. and Williams, A. 2000. The status of employment in the South African clothing sector: Diverting a "race to the bottom". Paper presented to the Trade and Industrial Policy Secretariat 2000 Annual Forum, Glenburn Lodge, Mulderdrift, 18-20 September. www.tips.org.za/papers/list.asp. Accessed: 27/6/2001.

IMF (International Monetary Fund). 2001. IMF concludes Article IV Consultation with Mozambique. IMF Public Information Notice.

Jafta, R. and Jeetah, R. 2001. SADC study of the textile and garment industries: South Africa. Report for the Southern African Development Community.

Jeetah, R. 2001. SADC study of the textile and garment industries: Namibia. Report for the Southern African Development Community.

Jeetah, R. and Coughlin, P. 2001. SADC study of the textile and garment industries: Mauritius. Report for the Southern African Development Community.

Jenkins, C. 2001. *Integration and Co-operation in Southern Africa*. OECD Development Centre, Technical Paper 172.

Kathuria, S. and Bhardwaj, A. 1998. Export quotas and policy constraints in the Indian textile and garment industries. World Bank Working Paper 2012.

Khanna, S. 1993. The challenge of global competition in the 1990s: An agenda for enhancing the competitive position of the Indian textiles and clothing industry. Mimeo, ICRIER, New Delhi.

KSA (Kurt Salmon Associates). n.d. Quick response implementation: Action steps for retailers, manufacturers and suppliers. Promotional pamphlet.

Lall, S. 1996. Coping with new technologies in emerging Asia. *Asian Development Review*, special issue to commemorate the Asian Development Bank's 30th anniversary.

Lall, S. and Wignaraja, G. 1998. *Mauritius: Dynamising Export Competitiveness*. London: Commonwealth Secretariat.

Lewis, J. 2001. Reform and opportunity: The changing role and patterns of trade in South Africa and SADC: A synthesis of World Bank Research. World Bank Africa Region working paper 14.

Longo, R. and Sekkat, K. 2001. New forms of co-operation and integration in emerging Africa: Obstacles to expanding intra-African trade. OECD Development Centre technical paper 169.

Macamo, J. 2000. Barreiras administrativas ao investimento em Moçambique: Lições aprendidas da experiência de investidores recentes. Gabinete de Estudos (Ministério de Plano e Finanças) discussion paper 17.

Mauritius Ministry of Finance, Government of Mauritius. 2000. The present state of the economy. http://ncb1.intnet.mu/mof/ministry/state/index.htm. Accessed: December 2000.

Meyanathan, S. 1994. *Managing Restructuring in the Textile and Garment Subsector: Examples from Asia*. World Bank publication abstract.

Morisset, J. 2000. Foreign direct investment in Africa: Policies also matter. World Bank Policy Research Working Paper 2481.

Mozambique, Assembleia da República. 1999. *Lei do Trabalho, 20 de Julho 1998*. Maputo: Bureau de Informação Pública.

Murray, L. 1995. Unravelling employment trends in textiles and apparel. *Monthly Labour Review* (August).

MUSBA (Mauritius–U.S. Business Association) 2000. '2000 U.S. Textile Imports from Africa'. *Mauritius-U.S. Trade Bulletin* 6(8).

Pupphavesa, N. *Returning Textiles and Clothing to GATT Disciplines. World Bank*

Naudé, W. 1999. The impact of international transport costs on the exports of a developing country: The case of South Africa. Paper presented to the Trade and Industrial Policy Secretariat 2000 Annual Forum, Glenburn Lodge, Mulderdrift, 18-20 September. www.tips.org.za/papers/list.asp. Accessed: 27/6/2001.

Niekerk, M. 2001. S.A. tough for new business. *Business Day*, August 16. www.bday.co.za/bday/content/direct/1,3523,908844_6078_0,00.html. Accessed: 16/8/2001.

Omondi, V. 2001. Jobs for Kenyans, thanks to AGOA. *The East African*, July 30. www.nationaudio.com/News/EastAfrican/current/Regional/Regional10.html. Accessed: 4/8/2001.

Osman, S. 2000. Textiles and clothing sector strategy. Draft Report to the Department of Trade and Industry, South Africa.

Paredes, C. 1989. Exchange rate regimes, the real exchange rate and export performance in Latin America. The Brookings Institution, *Discussion Papers in International Economics*, no. 77.

Rubin, M. 1996. New strategies for the Mauritian textile industry. *Industry Focus*, September-October.

———. 2001a. SADC study of the textile and garment industries: Botswana. Report for the Southern African Development Community.

———. 2001b. SADC study of the textile and garment industries: Lesotho. Report for the Southern African Development Community.

———. 2001c. SADC study of the textile and garment industries: Swaziland. Report for the Southern African Development Community.

Rubin, M. and Mudenda, E. 2001. SADC study of the textile and garment industries: Zambia. Report for the Southern African Development Community.

SADC. 2001. Trade liberalization for textile and clothing products in the context of the SADC Trade Protocol. Background paper for the Round Table Discussions of June 2001.

Salinger B.; Amvouna, A.; and Savarese, D. 1998. *New trade opportunities for Africa.* African Economic Policy discussion paper 6.

Salinger, B. et al. 1999. Promoting the competitiveness of textiles and clothing manufacture in South Africa. Report for the United States Agency for International Development.

SEATINI. 2000. *Textiles, Background Readings*. High Level Meeting Mauritius.

Standard Bank, S.A Economics Division. 2000. SADC: Trading for development. Discussion paper.

Spinanger, Dean. 1998. Textiles beyond the MFA phase-out. CSGR Working Paper No. 13/98.

———. 1999. Faking liberalization and finagling protectionism: The ATC at its best. Background paper prepared for the WTO 2000 Negotiations: Mediteranean Interests and Perspectives, an ERF/IAI/World Bank Workshop, Cairo.

Stasavage, D. and Daubrée, C. 1998. Determinants of customs fraud and corruption: Evidence from two African countries. OECD Development Centre, technical paper 138, www.oecd.org/dev/pub/tp1a.htm.

Sekkat, K. and Varoudakis, A. 1998. Exchange-rate management and manufactured exports in sub-Saharan Africa. OECD Development Centre, technical paper 134.

SITRA (South India Textile Research Association) 1990. *Norms for Spinning Mills.* Coimbatore: South India Textile Research Association.

Tekere, M.. 2000. SA-EU Free Trade Agreement: Implications and Strategic Issues for SADC. Paper presented at SARIPS Conference on "Emerging Trade Relations in the 21st Century", Harare.

TIMSSA. 2000. Executive summary. In: *The SADC Textile Markets*. www.timsaa.co.za. Accessed: 22 June 2001.

Tsikata, Y. 1999. Liberalization and trade performance in South Africa. World Bank, Southern Africa Department, Informal Discussion Paper 13 on Aspects of the South African Economy.

Wadula, P. 2001. U.S. Customs battles to interpret import rules: Mauritius loses out on duty benefits under Opportunity Act. *Business Day*, February 16.

Watkins, K. 1997. Globalization and liberalization: Implications for poverty, distribution and inequality. UNDP Human Development Report Office, Occasional Paper 32.

Whalley, J. 1999. *Notes on Textiles and Apparel in the Next Trade Round.* Universities of Warwick and Western Ontario, and NBER.

WTO (World Trade Organization). 1997. *Comprehensive Report of the Textiles Monitoring Body to the Council for Trade in Goods on the Implementation of the Agreement on Textiles and Clothing during the First Stage of the Integration Proces*s. G/L/179.