

TECHNICAL REPORT

Strategies for Mozambique's Textile and Apparel Sector



NATHAN
ASSOCIATES INC.

www.nathaninc.com

SUBMITTED TO
USAID/Mozambique

SUBMITTED BY
Nathan Associates Inc.

PREPARED BY
Peter Minor

UNDER CONTRACT NO.

March 2005

Contents

1. Strategy Overview	1
2. Apparel Sector	4
Export-led Strategy	4
Markets	5
Market Access	5
Products	6
Action Plan	10
3. Textile Sector	15
Products	16
Action Plan	16
4. Cotton and Adding Value	17
Action Plan	17

1. Strategy Overview

The textile and apparel industries encompass a diverse range of products and inter-dependant processes. The production chain includes fibers, yarns and filaments, and knit, woven, and non-woven fabrics. Making-up products – the final step in preparing textiles for consumption – involves cutting, sewing, and integrating accessories and trims for ready-made garments. Final goods include clothing and textiles for the home and industry. Because the apparel sector requires 3-5 times more labor than other activities, such as spinning, weaving, knitting, or dyeing, it generates the most jobs in unskilled manufacturing in the world. Development of the sector often marks the first step in industrial development. Like other light and medium manufacturing industries, the sector not only lifts large segments of the population from subsistence wages in the informal economy but also employs some of the most disadvantaged workers, such as young uneducated women with few other employment options.

In Mozambique, only 8 percent of the country's 17 million people are employed in the formal economy. Though statistics are scarce, it is well known that apparel industry workers are often the sole earners in their households, in effect forming the essential component of the safety net that keeps many from sliding into deep poverty. It is therefore important to Mozambique's long-term development that it tap the potential of its apparel sector. The sector is not only labor-intensive, but the value added by garment workers, even to imported fabrics and accessories, could have a greater impact on employment and the country's trade balance than other activities in the textiles sector. Value added in the capital-intensive textile industry arises largely from the use of expensive, imported, machinery, spare parts, dyes, and chemicals as well as skilled foreign workers.

Mozambique's textile and textile product industries have gone through enormous change in the past two decades. After emerging from a war-torn, centrally planned economy, most firms faced a shortage of working capital and spare parts – all of which had to be imported – as well as local markets of fewer than 18 million consumers, most with incomes well below the poverty line. Moreover, restrictive labor laws and poor local management resulted in productivity and quality levels “well below international standards” (Werner International, 1980). Substantial imports of used clothing underscored the limited means of most

Mozambican consumers. Thus, local demand for new clothing and the productivity and size of the apparel industry could not sustain the capital investments that a competitive spinning, weaving, and finishing industry required simply to survive. Saddled with debt, rising labor costs attributable to new regulations and laws, and a centralized industrial strategy that put wealthy consumers in export markets beyond their reach, Mozambique's textiles and apparel industries dwindled to a few small suppliers of local niche markets. Most firms were not able to meet the global economy's high standards for quality, cost, and delivery or to meet the demands of free markets. Meanwhile, globalization was unabated. The recent elimination of textile and apparel quotas may have turned the industry into one of the world's most globalized.

Globalization, though controversial, offers opportunities to produce and consume a wide variety of high-quality goods and services at the lowest possible cost. In the textile and apparel industries, large producers and retailers manage complex, efficient, and responsive production chains to meet consumer requirements for price, quality, and value. For example, production is increasingly carried out in different locations. Fibers are produced where climates, natural resources, and yields help producers meet expectations for quality and price. Fiber processing is determined by the needs of yarn-consuming industries, which needs vary by product, quality, and price requirements. Fabrics, in turn, are sold locally and globally. Apparel manufacturing is located where costs and trade preferences are desirable, and where buyer requirements for delivery, quality, and services can be met. A one-size-fits-all model does not exist.

To succeed, Mozambique's industrial strategy for the buyer-driven textile and apparel sector must capitalize on the sector's natural advantages and globally competitive strengths, while aiming to meet the requirements of global markets, rather than the desires of the government, suppliers, or the public. The strategy must match Mozambique's development objectives with market requirements to ensure practical, sustainable results.

In addition, the national industrial strategy needs to encourage linkages to the textile value chain—from the cotton fields to ginning, yarn spinning, knitting, weaving, dyeing, and making-up products. In the near and medium-term, this means that the quality and yields of cotton crops must be improved so that high-yield, high-quality cotton can boost the competitiveness of the spinning industry for local, regional, and export markets. Improving cotton production not only complements strategies for agricultural and rural development but also can raise incomes and enable and encourage *long-term integration* of the textile and textile product value chains in a manner consistent with high-quality, sustainable investment, technological modernization, and a competitive cotton-to-garment industry. Exhibit 1 summarizes the strengths, weaknesses, opportunities, and threats facing Mozambique's apparel and textile industries. Remaining sections of this paper present strategies for apparel and textile sector development.

Exhibit 1*Strengths, Weakness, Opportunities, and Threats (SWOT) Analysis***STRENGTHS**

- Competitive wages
- Electric and water supplies
- Port access to major markets (Durban and Johannesburg)
- Free Zone legislation
- Tax breaks and a flexible investment incentive system
- Potential to build cotton chain

WEAKNESSES

- Poor investment, labor, and business environment regulation
- Inordinate time to establish a formal business
- Uncertain investment climate
- Poor local infrastructure
- Small local market, with most consumers below the poverty line
- No organization for promoting industry and foreign investment (development corporation)
- Poor development of centralized free trade zones
- Low productivity because of malaria and HIV; weak infrastructure (sewage, hygiene, nutrition); lack of training, of amenities such as lighting and air conditioning, of local financing, and of local materials for export-quality products; long lead times for inputs and delivery; and long transport time to major developed markets

OPPORTUNITIES

- Tariff-free access to U.S. market for qualified apparel under the African Growth and Opportunity Act (AGOA)
- Ability to use fabrics from any country to qualify for tariff-free treatment under AGOA third-country fabric provision (through September 2007)

- Tariff -free access for qualified apparel and textiles under the EU Everything But Arms Agreement (EBA) and Cotonou Agreement
- Tariff-free access to Africa's wealthiest market, South Africa, for qualified apparel under the Southern Africa Development Community (SADC)
- Increasing demand for raw cotton and yarn and rising prices in major markets likely with the elimination of MFA quotas on January 1, 2005 and the proposed elimination of U.S. cotton subsidies in the WTO Doha Round
- Market trends towards greater quantities of standardized apparel and low costs
- Expiration of AGOA third-country fabric provision (need for local SSA cotton, fabrics, and yarn, also see threats for apparel products)

THREATS

- Elimination of MFA quotas and concentration of production among the largest and most efficient global suppliers
- Expiration of AGOA third-country fabric provision in September 2007
- Expiration of Cotonou Agreement in 2007
- Growing list of preferential suppliers
- South African customs (90 day withholding of tariff pending documentation of onward forwarding of freight trucked across the border)
- Recognition of Mozambique declarations of origin
- Low quotas for apparel made from non-SADC fabrics
- Evolution of retailers concentrating orders directly with suppliers

2. Apparel Sector

The top goals of Mozambique's industrial policy are job creation, poverty reduction, and contributions to the external trade balance. Other goals include geographical diversification of industry and enhancing value added and linkages to other sectors, in particular natural resources and agriculture. Development of the apparel industry can be the first logical step in reaching these goals. Worldwide, the industry creates the most jobs for low-skill laborers – and in Mozambique low-skill, low-cost labor is abundant. For many of society's disadvantaged, including young women with few alternatives, employment in the industry is the first step into the formal economy, which offers higher wages and better working conditions than the informal economy. Workers in the industry are often the sole earners in extended families that include the elderly and children.

Export-led Strategy

Attracting foreign investors for development of an export-led apparel industry could help boost job creation and reduce poverty in the short (1-3 years) and medium (3-5 years) term. Developing the industry to serve domestic markets is not likely to succeed at present. The local consuming population is small (18 million) and poor, able to afford only cheap imports of used apparel. Without such imports, Mozambique's poorest would have to divert scarce income from other necessities such as food, water, education, and medicine. The benefit of a few new jobs in an apparel industry dedicated to domestic markets would not justify the negative effects on cost of living. An export-led strategy recognizes that foreign markets offer far greater opportunities because of their size and wealth. To support production for the local market, the Government of Mozambique can contract for uniforms and provide assistance, including marketing assistance, for production for local niche markets, such as for Capulanas.

Because of the poor state of local transportation and infrastructure, and the importance of both to foreign investors considering locating in Mozambique, export-oriented industry will have to be near reliable infrastructure and have good access to ports and roads. As local infrastructure improves over the medium to long term, geographic diversification may be achieved.

Global trade in textiles also requires secure access to large purchasers of textile materials, such as local, regional, and global making-up industries. Therefore, the strategy makes development of a competitive apparel sector (making up) the first step (short term) and development of a competitive textile sector the second step (medium and long term). A competitive textile sector (knitting, weaving and spinning), the crucial link to Mozambique's cotton industry, completes the chain of value added and the linkage to natural resources.

While the short- and medium-term goal should be development of a competitive apparel industry, integration into textiles can be aided by supporting apparel producers who have experience integrating into the textile production chain.

Markets

The main markets for apparel include the United States, European Union (EU), and South Africa. The substantial amount of new apparel purchased by wealthy consumers in these markets supports the efficient scale of production required for modern apparel assembly. These markets have been changing substantially and will continue changing. Trends include retailer concentration and low-cost apparel that meets consumer's demands for quality and fashion. No market represents this trend better than the U.S. market, where retailers, such as Wal-Mart, are revolutionizing apparel retailing. Even full-service, fashion retailers are having to lower prices. The EU market is still highly fractionalized with smaller retail chains, although many retailers say they are not far behind the trends in the U.S. retail market. South African retailers, such as Woolworth, are also advancing their quality and lowering their price points. These retailing trends are pressuring apparel suppliers to lower costs. They do this in part by improving management and productivity, but rely mainly on boosting volumes of standardized clothing and relocating and concentrating production in countries with lower wages and production costs.

What do these trends mean for Mozambique? They represent an opportunity in that greater volumes of basic apparel and low-cost production should favor Mozambique, which has abundant low-wage labor, a low cost of living, and is close to one of the three major markets. And they are threat in that Mozambique's low productivity and regulations affecting labor, investment, and infrastructure can easily undermine competitiveness. Apparel suppliers seek not only low labor costs, but also good infrastructure and regulatory environments conducive to predictable business and investment practices.

Market Access

Market access, through tariff reductions and generous quotas, and the competitiveness of a country's industry largely determine the export success of most developing countries in the

textile and apparel industries. At present, conditions for accessing major developed markets are very uncertain. Preferential trade arrangements, such as the U.S. African Growth and Opportunity Act (AGOA) and the EU's African, Caribbean, and Pacific Islands (ACP) Cotonou Agreement, encouraged bold development of regional textile and apparel industries. But the elimination of quotas on January 1, 2005 nullified a primary reason for locating apparel production in sub-Saharan Africa: quota access.

Uncertainties associated with quota elimination are compounded by uncertainties associated with remaining tariff preference programs. Rules of origin defining apparel eligible for duty-free access under the AGOA and ACP/Cotonou programs are scheduled to expire in September 2007. Under AGOA's least-developed country derogation LDCs can export apparel that uses non-regional fabrics and yarns to the United States. ACP\Cotonou permits duty-free access to the EU for apparel constructed from regional fabrics and yarns (e.g., material from Mauritius).¹ The EU's Everything But Arms (EBA) program also permits duty-free access but does not have such liberal rules of origin. ACP\Cotonou will be replaced by economic partnership agreements (EPA) now being negotiated. If Mozambique does not conclude an EPA with the EU by 2007, its access will be governed by the EBA program.

At present, the conditions of EPAs are vague but EU officials have indicated how the rules of origin might work. The EU may permit the use of a broad range of fabrics formed in any sub-Saharan country (known as full-cumulation), perhaps including South Africa. Generous third-country derogations, like those of AGOA, are unlikely. Given Mozambique's extremely limited textile capacities, the rules of origin that govern its access to major markets are critical to apparel producers. Mozambique must make the negotiation of rules of origin for any future trade agreement a high priority.

Products

Apparel can be thought of as consisting of fashion products, fashion-basic products, and basic products.² A sector strategy should also take into account other cotton and cotton knit products, products that make use of low-skill labor, products intended especially for the South Africa market, as well as competition from imported used clothing.

¹ South Africa is not an ACP country, so the use of South African yarns and fabrics does not qualify apparel constructed of these materials for tariff relief under ACP\Cotonou. A special provision for the use of South African yarns and fabrics is included in the arrangement, but has never been implemented through legislation in South Africa and ACP countries.

² *A Stitch in Time*. 1999. Oxford University Press.

FASHION PRODUCTS

The marketing costs and long lead times of fashion items do not serve Mozambique's employment objectives. While high fashion holds long-term potential, it requires considerable marketing and expense. In the high-fashion market, buyers favor established suppliers with a solid history of networking and contacts. Networks are developed with established expatriates in market centers such as New York and Los Angeles. Mozambique's near-term potential in this segment is limited.

FASHION-BASIC PRODUCTS

In this segment delivery, services, quality, and product range are more important than cost. Products and producers include most name brand apparel producers, such as Liz Claiborne, Levi Straus, and major department stores. While services are more important than cost, the supplier's ability to manage high-level services while controlling costs is a primary requirement. Buyers usually seek "full package" producers that can manage every detail of the supply chain, from fiber to the showroom floor. These services include design, quality control, cutting, sewing, sourcing raw materials, logistics, and labeling. Local industry and infrastructure must be able to support such services as well as shorter than average lead times for re-orders. Apparel companies successful in this segment are more closely coordinating with textile producers and retailers. Because of limits on product range, vertical integration can be as limiting as it is beneficial. Given its distance from the U.S. and EU markets, and its present lack of a skilled and experienced service infrastructure, Mozambique would have considerable difficulty attracting suppliers for this market segment.

BASIC PRODUCTS

To keep costs low and predictable, competitiveness in basic products requires political stability, a good business environment, and sound investment laws. While producers are willing to trade market proximity and lead times for lower average costs, they still require a predictable and reliable shipping schedule. Production inputs and exports should rapidly clear customs, and customs procedures should not tie-up working capital in complex duty rebate programs. Government corruption and the "unofficial" costs of getting a product to market should be minimal, but above all, predictable and stable. Obscure government processes and regulations and complex labor laws make it difficult to plan production costs and schedule production. Producers do not require significant local services for design pattern-making and pre-production process because apparel lines are standardized and pre-production is often coordinated from central offices. Production volumes are high, though, usually requiring 2,000 or more machinists to service the U.S. market, and somewhat less for the EU and South African markets. The size of efficient establishments has been increasing; a minimum establishment size of 5,000 or more to service the U.S. market is not unusual.

Mozambique can achieve rapid growth in the basic products segment—but it can also experience decline just as rapidly. Competition is intense. The major apparel manufacturing countries, from China to India to Mexico, are all trying to build market-share in basic products. The basic product segment is the largest product market and encompasses every product, from trousers, hosiery, undergarments, dress, shirts, skirts, and suits. Establishing producers and product categories that have a history of backward integration into textile products and processes could spur development of these industries and fully leverage the natural advantages of Mozambique’s raw and ginned cotton industries.

PRODUCTS FOR VERTICAL INTEGRATION

The following products have a history of lower than average capital requirements targeted for vertical integration: cotton knit undergarments, cotton hosiery, and cotton knit shirts and sweaters.

Cotton Knit Undergarments. The making-up of knit undergarments has very low profit margins because value added per garment is low. Major producers of knit undergarments often seek sites for long-term vertical integration, which allows them to capture more value added while controlling processes and costs. Producers often “test” production locations with cut-make-trim (CMT) operations with medium and long-term goals of establishing vertical or contract spinning and knitting operations. Capital requirements are lower than those of weaving operations, but are still substantial, between US\$ 30-40 million. Producers include Hanes, Fruit of the Loom, Gildden Mills, and Russell.

Cotton Hosiery. U.S. imports of cotton hosiery exceeded US\$ 600 million in 2004. Major exporters to the U.S. market include suppliers in Korea, Mexico, and Central America. The rules of origin for preferential suppliers, such as Mozambique, are an exception to the normal rules of origin and provide an advantage to countries with raw cotton supplies.

Cotton Knit Shirts and Sweaters. U.S. imports of knit shirts and blouses exceeded US\$ 2 billion in 2004. This segment includes a wide variety of vertical and non-vertical producers making everything from basic products to high-fashion items. Vertical integration into knitting and spinning can provide distinct cost and quality control advantages and improved lead times over imported fabrics.

PRODUCTS THAT USE LOW-SKILL LABOR

Knit products offer good possibilities for vertical integration based on relatively low capital outlays but do not make full use of one of Mozambique’s competitive advantages: low-skill labor. Low-skill labor constitutes 25 percent or less of the f.o.b value of these products. For cotton hosiery, the value added by labor can be 10 percent or less. Products that use more labor *and* more skill include dress shirts, suit jackets, and women’s ensembles. Low-skill labor

is used more to produce heavyweight cotton trousers and denim jeans. Heavyweight trousers often require 30-50 percent value added by labor because of the large number of components (pockets, liners, waste bands). And, since much of the sewing is done inside the trousers and fabrics are usually a solid color, details are less critical and require less skill. In addition, heavyweight trousers are often standardized (although fashion denim jeans are a major exception) with only small changes in styling from year to year, if ever. Buyers of basic heavyweight trousers include most major low-priced retailers, including K-mart, Wal-Mart, and Target as well as name brands such as the Gap, Levi, Lee, and Wrangler.

PRODUCTS FOR THE SOUTH AFRICA MARKET

Making up a wide range of apparel for the South Africa market also holds potential for Mozambique. South African labor costs are much higher than Mozambique's and South Africa's labor laws and regulations raise manufacturing costs significantly. Lesotho and Swaziland host many South African producers. Lesotho's higher cost of living, however, makes the prevailing wage paid by apparel producers inadequate, raising concerns about labor conditions and stability. Swaziland is experiencing significant labor unrest. Mozambique could be a good alternative for South African producers seeking a stable and productive work force and a low cost of living for low-wage workers. Mozambique's lower cost of living (food, rent, clothing) is a distinct competitive advantage in achieving a sustainable business-labor model. Moreover, the volatility of the South African Rand raises continual concern for the predictability necessary to maintain costs.

USED CLOTHING

Countries such as Nigeria, Ethiopia, and South Africa have banned used clothing imports with an eye to developing local textile and apparel industries. To succeed, such industries must be serving a large number of consumers with modest to high incomes. Though serving a relatively large and affluent populace, South Africa's producers try to be everything to everybody, which causes inefficiencies, higher prices, and lower quality. South African producers have also been under intense competition from imports despite tariffs of more than 20 percent. Nigeria does not have an affluent population, so the import ban is borne by the poorest who can barely afford proper nutrition, clean water, education, and medicine, much less high-priced, low-quality, locally produced clothing. Who benefits? A few local producers who employ only a small fraction of the total population and smugglers who take their cue from higher prices and the desperate needs of the poor. If implemented in Mozambique, an import ban would erode one of its natural competitive advantages: a low cost of living that makes low incomes tolerable.

In addition, any increase in employment from the growth of a local apparel industry must be weighed against the loss of jobs in imported used clothing. Thousands of workers sort, grade, clean, and organize the used clothing and used clothing has its own production activities.

Banning used clothing is unlikely to reinvigorate enough local suppliers to justify the ill effects on employment and poverty and would not lead to a globally competitive industry. Mozambique is a poor country, with more than two-thirds of the population below the poverty line; and HIV/AIDS has skewed the population to the very old and the very young—45 percent of the population is 14 years old or less. A population of this demographic is addressing very difficult issues in fulfilling basic human needs at the lowest cost possible. Given the minimal benefits of banning used clothing and the bad effects on poverty, industrial policy should eschew a ban except in relation to certain niche products (e.g., uniforms, capalanas, and certain artisan products).

The secondary benefit of banning imported clothing would be stimulation of the local textile industry. Textiles manufacturing is capital-intensive, using imported materials (dyes and chemicals) and equipment. The average value added by labor, skilled or semi-skilled, is often less than 10 percent of the final cost (electricity, cotton, and profits make up the balance). Because cotton is already sold at world prices, Mozambique's poor would benefit little from establishment of a textile industry for local use. Import substitution would be low or non-existent. The impact on the foreign trade balance could even be negative, as imports of machinery and materials (imported fabrics and yarns) could outstrip the apparel imports they were intended to replace, not to mention the loss of foreign exchange from local cotton exports. If the high-quality cotton Mozambique exports to Europe is forced into a local textile industry, the value of that cotton will likely diminish, since lower quality cotton, yarns, or fabrics could be used in its place for the local market. The best policy would encourage the export of high-quality cotton and the import of lower quality cotton, yarns, and fabrics for the local market.³

Action Plan

The Government of Mozambique can encourage the development of an apparel industry, or even a textile industry in Mozambique, by addressing issues central to the decisions of apparel producers. Specifically, the government can strive to improve infrastructure; improve laws and regulations; develop centralized industrial free zones; and create a foreign direct investment promotion program. These are all prerequisites to developing this sector.

IMPROVE INFRASTRUCTURE

The quality of infrastructure—roads, water, electric, telecommunications, buildings—all figure in an apparel supplier's decision to locate in a particular country. At present, many of

³ In a 1980 report on Mozambique's apparel industry, Werner International r pointed out that expensive, high-quality fabrics were being used for second-quality locally consumed garments, thus wasting valuable resources.

Mozambique's roads, ports, and buildings are in poor repair. Clean water and electric supplies are inconsistent. Improving infrastructure can only help attract producers with high standards for quality and labor. To do so cost-effectively, the government should prioritize development in industrial zones close to the best ports and roads. Infrastructure maintenance will also be a crucial factor in sustaining industry once it relocates to Mozambique. Coordinating development of industrial zones with the nation's free zone policies seems a logical strategy, creating safe, secure industrial clusters with well-maintained and reliable infrastructure. Tenants could be charged rents for maintenance of these facilities.

IMPROVE THE INVESTMENT AND BUSINESS CLIMATE

Mozambique has business elements sought by world-class apparel producers: abundant low-cost labor; port and shipping access; and a stable government and economy. Mozambican producers, however, will have to compete with producers operating in superior business environments. Such environments are characterized by flexible labor laws that support the rights of workers but permit shift work, retrenchment, and employment of foreign workers, especially skilled middle managers; customs offices that clear imported materials and supplies on a duty-free basis in less than 24 hours; customs offices and ports that clear and load finished products in an environment free of corruption and secure against terrorism; reliable and swift ocean and air transportation networks; access to capital and equipment on a tariff-free basis; freedom from excessive red tape; and a skilled, trained, and productive labor force.

The best way to encourage an export-oriented apparel industry in Mozambique is to put in place policies that promote transparency; reduce the risks and uncertainties of starting a business for local, regional, and foreign investors; and promote productivity, innovation, and workforce incentives.⁴ Such policies would also encourage development and growth in a broad range of industries and services.

If Mozambique decides to pursue policies to develop textile and/or apparel industries, it will also need to attract foreign investors. This will require ensuring rapid and consistent clearance of goods through ports and customs offices. Apparel producers, who are subject to the rigorous demands of retailing, depend on efficient and delay free supply chains. Indeed, a one-day delay in shipping in the international garment industry is estimated to be equal in cost to a tariff of 0.8 percent (Hummels 1999). Moreover, delays in imported inputs can result in low utilization of labor and machinery and higher average costs as workers are required to wait for essential materials. Because Mozambique is, at best, 30 days by ocean freight (Maputo-Durban-New York) from the U.S. market, it is at a distinct disadvantage compared to East Asian suppliers (12 days) and regional suppliers in the Americas (3-12 days). In other

⁴ Buyers and retailer in the United States revealed that these issues strongly affect the decisions of foreign investors in the textile and apparel industries (USITC 2004).

words, Mozambique's location alone can negate its tariff advantage in the U.S. and EU markets. It is therefore essential that hindrances within the control of Mozambique's producers and government—customs, red tape, transportation—be reduced because they can quickly render Mozambique's products non-competitive.

The reliability of shipping times is also of concern. It can take from 1 to 17 days for goods, imports or exports, to clear customs in Mozambique.⁵ Goods that arrive late in the major markets are often subject to severe discounts and orders received late can be cancelled. How important is it to get garments to market on time? Even Asian suppliers, who are closer to the U.S. market than Mozambique, airfreight one-quarter or more of their U.S. shipments.

Mozambique's inflexible labor laws also hinder the development of a competitive textile and apparel industry. The world market for apparel is in constant flux. Buyers frequently cancel orders or place large re-orders when realized commercial sales clear shelves more rapidly than expected. Textile producers also require flexibility. Even under the best of circumstances they must run expensive capital equipment for extended periods, pausing only for maintenance or to switch patterns and designs. Running machinery through multiple shifts allows them to meet surges in demand with higher operating rates rather than risky investment. Higher operating rates and profits, in turn, encourage investment and capacity expansion. Clearly, apparel and textile suppliers require a flexible labor environment, wherein workers are permitted to work multiple shifts (even for a premium) and hiring and retrenchments can take place in accordance with the performance of the industry and supply and demand (most producers retrench labor very reluctantly because the hiring process imposes high costs).⁶

Under Mozambique's laws, however, it is difficult to hire foreign managers, difficult to have employees work overtime and in shifts, and costly to retrench workers. Producers, for example, must make large severance payments if a worker is retained for more than two years.⁷ Local industry representatives most often cite retirement and retrenchment laws as the reason for the poor condition of the textile and apparel industries. High absentee rates⁸ and worker turnover, encouraged by laws discouraging retrenchment, can also deter international investors and will erode the competitiveness of Mozambican firms competing against imports and in export markets. Retirement and unemployment pay might be feasible under a pay-as-you-go tax system based on a proportion of the worker's wage. At the same time,

⁵ Local sources report that in exceptional circumstances, Mozambique customs will work extra hours and weekends to meet a shipper's schedule. At the same time, if paper work or a shipment's status is in the least out of order, delays can be excessive.

⁶ Labor codes of conduct for many branded apparel companies permit a 48-hour work week with up to 14 hours of overtime (compensated at a higher rate).

⁷ Supposedly this requirement can be circumvented by periodically retrenching experienced workers and then re-hiring them later. This is not, however, the best way to train and retain qualified staff capable of greater productivity and management.

⁸ A 1980 Werner International report on Mozambique's apparel industry cited absentee rates of 20 percent or more. In most instances, productivity benchmarks indicated that more could be produced with about one-third the reported employment in factories if proper management techniques were used.

international investors will also be looking to see if Mozambique has created credible government institutions and laws guaranteeing that international labor standards are met.

The role of a one-stop-shop for foreign and local investors should be prioritized and the shop empowered to deal with government bureaucracy on behalf of investors.

CREATE INDUSTRIAL FREE ZONES

Mozambique's laws governing free trade zones are relatively well developed. They allow any firm that exports more than 70 percent of its production to take advantage of duty-free inputs and special tax incentives. They also permit the bonding of any establishment that meets this criterion and applies for the appropriate authorization.

This decentralized approach is in contrast to some countries that provide designated industrial zones where all companies within the zone are companies that export and receive special benefits. Creating special, centralized, industrial free zones can benefit Mozambique in two ways. First, it will allow the government to address some immediate concerns regarding infrastructure by focusing investment in limited geographic area, close to ports and transportation infrastructure desirable to exporters. Second, it will create a focal point for eliminating red tape and slow customs procedures. Government officials working in free trade zones often adapt the accommodating and transparent processes that exporters require. In essence, simply being closer to a cluster or concentration of export-oriented firms creates a conduit for communication and the sharing of common values. The value of these synergies in a country otherwise slow to change cannot be overstated.

Centralized free zones could also facilitate coordination with South African customs officials and address security and customs concerns in other countries. Today, South African customs officials are very suspicious of shipments from Mozambique, no matter what the shipping documentation or destination, including onward shipment to other countries. Having central export processing zones, with a high level of integrity and bonding of goods for re-export through South African ports, could reduce shipping times through Mozambique's ports.

FOREIGN DIRECT INVESTMENT PROMOTION

Realizing investments will require more than a package of laws, regulations, and incentives suitable to apparel investors. Few foreign investors are familiar with Mozambique as a location for producing apparel. Mozambique will have to promote itself and its advantages and encourage a flow of information between government and investors. The Government of Mozambique needs to create an investment promotion package that prospective investors can respond to by investing, by requesting adjustments that address shortcomings in Mozambique, or by expressing further requirements to be addressed by government officials. The government can then refine the promotion package.

A governmental or quasi-governmental organization can assemble an initial investment promotion package and contact foreign investor prospects such as South African producers, Asian transnational producers (such as those already in the region), and producers of vertically integrated knit apparel in the United States, Europe, and South Africa. The organization should also contact producers with direct ties to buyers to minimize the risk inherent in contract production, although this may be unavoidable in many cases.

The initial package needs to take into account the considerable risks and uncertainty of being first investors in this sector, which has few examples of success. In this regard, the objective should be to create an initial cluster of 3-5 apparel firms. The success of these firms over the short and medium term will signal to other investors that Mozambique is ready to meet their needs to be competitive in the global market. This initial package, offered to the first firms to locate in Mozambique, should include extended tax holidays and preferred buildings and infrastructure.

Further requirements may emerge, but the entity responsible for foreign investment promotion should be required to work closely with foreign investors to identify their interests and respond to their concerns till deals are struck. Financial incentives, however, are rarely the honey that attracts investors in this industry. Investors will be attracted by the likelihood of long-term profitability and security. Activities to attract these investors should focus on non-monetary measures within the control of government authority.

After the initial cluster of firms is attracted, the focus should shift to creating a free trade zone association, private and/or governmental, that will continue addressing the concerns of foreign investors and producers. The government or private investors can expand facilities within the free zones, while charging rents commensurate with costs and maintenance for buildings and infrastructure within the industrial park(s). The central government would secure and improve transportation, ports, and communication infrastructure.

3. Textile Sector

The textile sector comprises spinning, knitting, weaving, dyeing, and finishing—capital-intensive activities requiring imported equipment and materials. A competitive textile sector reduces lead times and production cycles for apparel, lowers materials costs, and meets rule-of-origin requirements for exporting apparel qualified for duty relief (EU, US, SADC).

Lead times and production cycles are best shortened by means of vertically integrated companies that coordinate apparel production with internal spinning, fabric forming, and dyeing capabilities. Apparel suppliers can also benefit from close association with independent or contract textile producers, but competing orders, from various buyers, for the same production facilities can cause bottlenecks and increase lead times. In addition, a limited selection of weaves, prints, and dyes can reduce lead times by requiring textile producers to plan production far in advance to obtain dyes and chemicals for special orders.

Likewise, material costs are best lowered through vertically integrated operations, which can reduce product cycles and inventories (raw materials and semi-finished products) in accordance with orders. And if local cotton is used, shipping and warehousing costs are minimized. Note that crop seasonality and variations in cotton quality and grades will still require warehousing and imported materials. Thus, national policy should permit cost-effective and flexible sourcing of raw material in contrast to laws that mandate the use of local inputs.

Perhaps the most compelling reason for integrating into textiles is the ability to meet U.S., EU, and SADC rules of origin and thus avoid substantial tariffs on apparel. While the United States provides derogation on the rule of origin through September 2007, permitting the use of fabrics from anywhere in the world, the EU and South Africa require that apparel benefiting from duty-free treatment be formed in the region. Specifically, garments must be constructed of fabrics formed in ACP or SADC countries to enter the respective markets and be eligible for a tariff reduction. In most cases, the yarns can be from anywhere. After September 2007, apparel exported to the United States must be constructed of yarns and fabrics formed in sub-Saharan Africa or the United States to be eligible for duty-free treatment. In all cases, the production of knit to shape and circular knit garments (such as

hosiery) are held to a stricter standard. In the United States, the fibers of these special knit products must be from the United States or sub-Saharan Africa. In the EU and South Africa, the yarns must be spun in the region in addition to forming fabrics and making up garments.

The benefit of a vertically integrated textile and apparel industry needs to be balanced against the risks, technical challenges, and capital requirements of a textile industry. The textile and apparel industries are now buyer-driven industries. Investment in textile products needs to be coordinated with end customers; otherwise capacities will be underused and expensive, and unwanted inventories will accrue. Most textile manufactures prefer to limit the degree to which they sell their goods on the open market, since the expense of locating customers can quickly reduce profits and force heavy discounts to secure orders. It is therefore of strategic importance that end markets for these products be secured before committing to significant investments. In Mozambique, an export-oriented apparel sector must first be established to justify large expenditures for development of a textile industry and to attract foreign investors to achieve the same goal. This is not to say that basic spinning operations could not be established, but they would require coordination with buyers within the SADC region or elsewhere. Foreign investors with established customers and technical knowledge are best suited to these purposes.

Products

Opportunities to develop Mozambique's textile industry include

- Spinning yarns for regional textile producers for U.S., EU and SADC markets;
- Knit fabrics for use in apparel to be exported to the United States, EU and South Africa;
- Industrial textiles for local and regional markets (e.g., towels, sacks); and
- Traditional textiles for use in apparel and home products for export.

Action Plan

The development of a textile industry will likely require foreign investors for financing and technical expertise. Acquiring investment is not likely in the near-term and is therefore medium to long-term goal. In addition to the action plan for apparel, the following steps should be pursued:

- When seeking investors in the apparel industry, give priority to producers with proven experience in integrating into the production of fabrics and yarns.
- Identify and market spinning potential to buyers of yarns and contract producers.
- Explore the development of traditional design and patterns for use in traditional garments.

4. Cotton and Adding Value

The production of high-quality textiles and apparel depends on the sourcing of good cotton. Managing the supply chain from cotton to finished goods is a complex process that requires good management at every point to achieve the maximum value added in international markets. Cotton production is itself complex, requiring high-quality inputs, technology, and processing and delivery to markets that offer the best price at the time of harvesting.

Today, the production of good quality cotton in Mozambique is considered a national asset, foreign exchange earner, and source of income for many small landholders across the country. But large subsidies by major developed countries and China push down cotton prices. Given this situation, the Government of Mozambique needs to act to maintain investment and productivity in this sector. Specifically, the strategic plan for cotton production calls for improving (1) the income of small landholders and (2) the productivity or yields of cotton crops. For example, small landholders rarely have the financial means to purchase high-quality seed cotton, a crucial step in boosting quality, yields, and income. This problem is largely worked around in Mozambique through a concession system that requires producers to sell their crops to joint venture companies (JVCs) at government-set prices for ginning and marketing. The JVCs in turn, provide landholders fresh seed cotton and limited technical assistance. This system is necessary because modern credit instruments are not available. Credit schemes are also limited by limited property rights under Mozambique's traditional landholding system. This system leaves little collateral for credit.

Action Plan

The incomes of small landholders and sector productivity can be improved through short-, medium, and long-term actions:

SHORT AND MEDIUM-TERM

- Institute incentive-driven performance contracts between government and JVCs that encourage investment in research, technology, and productivity.

- Rapidly review and adopt techniques that have been proven to enhance productivity within the region, such as new seed varieties and treatments.
- Explore new financial and credit mechanisms that will enable and encourage small landholders to innovate and invest in productivity enhancements.
- Increase small landholders' participation in the activities and incomes of JVCs, perhaps by encouraging them to take partial share ownership.

LONG-TERM

- Reform concession structures while addressing finance and credit issues through stronger legal systems and ownership rights.
- Investigate new crop strains.
- Develop the country's capacity to evaluate the impact of adopting new bio-tech crops that can significantly boost productivity and quality.